CURRICULUM VITAE

PERSONAL DETAILS

NAME: Dr. Moinuddin Sarker, PhD, MCIC, FICER.

CORRESPONDING ADDRESS:

1376 Chopsey Hill Road, Bridgeport, CT-06606, USA

TELEPHONE: (+1)-203-406-0675 (Office) **FAX:** (+1)-203-406-9852 (Office)

: (+1)-203-956-7501 (Res.) **TEL:** (+1)-203-317-0593 (Res.) **:** (+1)-203-536-5855 (Cell) **FAX:** (+1)-203-371-8137 (Res.)

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E-MAIL : msarker@naturalstateresearch.com

: moinanju@gmail.com : sarkermm@yahoo.com

LANGUAGES: Bangla (Bengali) - Mother Tongue

English - Fluent in Speaking and Writing.

Hindi and Urdu Speaking only

Social Networking:

Linkedin.com: http://www.linkedin.com/profile/view?id=37110839&trk=tab_pro

Facebook.com: http://www.facebook.com/home.php

Twitter.com: http://twitter.com/#!/moin1966

Skype.com: msarker1

Objective- To contribute and expand my knowledge and professional experience of Physical, Inorganic, Analytical, Environmental Chemistry and Mineralogy, Solid State and Condensed Matter Physics, Material Sciences, Synchrotron Radiation, Surface Sciences (UHV), Semiconducting Interfaces, Thin Films, Quantum Dots, Waste Conversion into Energy especially **Waste Plastics to Hydrocarbon Fuels** (all Polymer based Waste), Alternate Source of Energy such as Waste to Energy, Solar, Wind and Natural Gas, Polymer Physics and Chemistry through research and development in a Research Institute and Company.

EDUCATION:

1992-1996

Ph. D. (**Doctor of Philosophy**), Department of Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK.

Thesis Title: Surface Chemistry of High Temperature Superconducting Oxides.

1991-1992

M. Sc. (By Research), Department of Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK.

Thesis Title: Surface Chemistry of High Temperature Superconducting Oxides.

1988-1990

Master of Science (By Course), Department of Chemistry, University of Chittagong, Chittagong, Bangladesh.

1984-1987

Bachelor of Science (Hons.), Department of Chemistry, University of Chittagong, Chittagong, Bangladesh.

WORKING EXPERIENCES:

Job # 1 (Current)

May 2012 - Present

Position: Vice President (VP) of Research and Development (R & D), Head of Science Team.

Supervisor: Dr. Karin Kaufman

Address: Natural State Research (NSR) Inc., 37 Brown House Road, Stamford, CT 06902, USA.

Project: Waste conversion into Energy / Fuel, especially recycling Plastics, Municipal Solid Wastes (MSW) and convert them into Fuel.

Sample Characterization Techniques: Elemental Analysis (Exeter Analytical), Gas Chromatography (GC) /Mass Spectroscopy (MS), Thermal Gravimetric Analysis (TGA), Differential Thermal Analysis (DTA), Differential Scanning Calorimetry (DSC) and Atomic Absorption Spectroscopy (AAS) and other analytical tools.

In addition since 2008 I have been working also as a Corporate Officer of Natural State Research, Inc. and only representative of NSR after CEO, Dr. Karin Kaufman.

Job # 2

January 2008 – April-2012

Position: Vice President (VP), Research and Development

Supervisor: Dr. Karin Kaufman

Address: Natural State Research (NSR) Inc., 37 Brown House Road, Stamford, CT 06902, USA.

Project: Waste conversion into Energy / Fuel, especially recycling Plastics, Municipal Solid Wastes (MSW) and convert them into Fuel.

Sample Characterization Techniques: Elemental Analysis (Exeter Analytical), Gas Chromatography (GC) /Mass Spectroscopy (MS), Thermal Gravimetric Analysis (TGA),

Differential Thermal Analysis (DTA), Differential Scanning Calorimetry (DSC) and Atomic Absorption Spectroscopy (AAS) and other analytical tools.

Job # 3

March 2005- January 2008

Position: Chief & Lead Research Scientist

Supervisor: Dr. Karin Kaufman

Address: Natural State Research (NSR) Inc., 37 Brown House Road, Stamford, CT 06902, USA.

Project: Waste conversion into Energy / Fuel, especially recycling Plastics, Municipal Solid Wastes (MSW) and convert them into Fuel.

Sample Characterization Techniques: Elemental Analysis (Exeter Analytical), Gas Chromatography (GC) /Mass Spectroscopy (MS), Thermal Gravimetric Analysis (TGA), Differential Thermal Analysis (DTA), Differential Scanning Calorimetry (DSC) and Atomic Absorption Spectroscopy (AAS) and other analytical tools.

Job # 4

May 2004-December 2004

Position: Senior Research Scientist (Professor Research # 2)

Supervisor: Prof. Dr. Patrick Ayotte

Address: Department of Chemistry, Sherbrooke University, Quebec, J1K 2R1, Canada

Project: The effect of Nano-scale structural and compositional heterogeneities on interfacial reactivity and transport in/on mixed ices with environmental pertinent compositions.

Sample Preparation: Molecular Beam Epitaxy (MBE).

Sample Characterization Techniques: SEM, TEM (Cryogenic), FTIR, QMS, Laser, XPS as well as XAFS techniques.

Job # 5

November 2001 – April 2004

Position: Post Doctoral Research Scientist

Supervisor: Prof. Dr. E. Daryl Crozier

Address: Department of Physics, Simon Fraser University (SFU), British Columbia, V5A 1S6, Canada.

Project: Project was involved with the determination of toxic metal oxides in Oyster and Floc from Boundary Bay beach, BC in Canada. The samples were analyzed by using

Synchrotron Radiation such as XAFS and Micro-probe XAFS and Solid State Techniques e.g. SEM, XRF, XRD and TEM.

Sample Preparation: Freeze dried samples obtained from Department of Biology at the SFU.

During my tenure at Simon Fraser University I was worked also on Au/Pd/Fe/GaAs thin films by MBE and samples studies were involved by using XAFS techniques.

Job # 6

November 2000 - October 2001

Position: Post Doctoral Research Scientist

Supervisor: Prof. Dr. G. A. Sawatzky

Address: Department of Solid State Physics, University of Groningen, Nijenborg 4, 9747, AG Groningen, the Netherlands.

Project: Investigation of Oligo Polymer (Polythiopenes), C_{60} and other Organic Materials for using Laser diode.

Sample Preparation Techniques: Molecular Beam Epitaxy (MBE) and Annealing in UHV.

Sample Characterization Techniques: AFM, STM and Optical Absorption Spectroscopy (OAS).

Job # 7

January 2000 – October 2000

Position: Post Doctoral Research Fellow

Supervisor: Prof. Dr. R. Szargan

Address: Wilhelm-Ostwald-Institut of Physical and Theoretical Chemistry, Department of Chemistry & Mineralogy, University of Leipzig, Linnestr.2, D-04103 Leipzig, Germany. Prof. Dr. Wilhelm Ostwald had been awarded for Nobel Prize in Chemistry on 1909, who was a Professor and Researcher of Chemistry Department in Leipzig University

Project: Investigation of Oxidation of a ZnS deposition on GaP(001) Substrate.

Sample Characterization Techniques: MBE and ESCLAB

Sample Characterization Techniques: XPS, AES, XPD, ARUPS, LEED, AFM and STM techniques and Synchrotron Radiation Source (BESSY II) in Berlin, Germany.

Job # 8

June 1997-1999

Position: Post Doctoral Research Associate

Supervisor: Prof. Dr. H. C. Ku

Address: Department of Physics, National Tsing Hua University, Hsinchu, Taiwan.

Project: Synthesis and determination of Physical Properties of New Superconducting / Magnetic System (Single and Polycrystalline). Especially, the project involved the synthesis and the growing of single crystal and poly crystal (Bi2Sr2Ca1-xRxCu2O8+d (R= Pr, Gd and Y doped) and Bi-doped Gd2-xBixCuO4 Cuprates) by Solid State Reaction / Self-Flux and Traveling Solvent Floating Zone (TSFZ) methods.

Sample Characterization Techniques: TGA/TDA, SEM, EDAX, XRD, SQUIDS at the Department of Physics and UPS and EXAFS at the National Synchrotron Radiation Research Center (NSRRC), Hsinchu, Taiwan.

Job # 9

June 1996-June 1997

Position: Post Doctoral Research Fellow

Supervisor: Prof. Dr. T. J. Chuang

Address: National Synchrotron Radiation Research Center (NSRRC), Science-Based Industrial Park, Hsinchu & Institute of Atomic Molecular Sciences (IAMS), Academia Sinica, Taipei, Taiwan. The President of Acedemia Sinica is Prof. Dr. Yuan-Tseh Lee, who had been awarded for Nobel Prize in Chemistry on 1986.

Project: Design and Construct beam line of Synchrotronised Soft X-ray Scanning Photoemission Spectromicroscopy (PESM). Especially this -involved design and construction of the beam line for X-ray photoemission microscopy (PEMS) combined with XPS, UPS, AES, STM and AFM techniques for analysis of semiconductors, metals and metal clusters.

Job # 10

August-December 1999

Program Manager (Research and Development Division)

Supervisor: Prof. Dr. Aka Firowz Ahmed

Organization for Social Development and Research (OSDER), Dhaka, Bangladesh

Responsibility: Writing proposal and conducting research for Non-Government Organization and dealing with foreign donor countries for helping disabled peoples, eliminating poverty and creating empowerment of destitute and oppressed women in Bangladesh.

Computer Experiences:

I have used Personal Computer and Macintosh to analysis samples by using different software's:

For Personal Computer (PC):

- 1. AutoCAD 13 and 14, TOPDRAW (For Design)
- 2. Origin 4.1, 5.0, and 6.1 (Data Analysis)
- 3. Unifit 3.1 (Data Analysis),
- 4. EXCURVE92 and 98 (For Data Analysis)
- 5. APL (Computer Language)
- 6. WinXAS 2002 (Data Analysis)
- 7. PCW /Crain03 (Crystal Determination)
- 8. Feef7, 8 for EXAFS data Analysis
- 9. Principal Component Analysis (PCA)
- 10. Labview and Matlab
- 11. Gaussian 98, 2002

Macintosh Computer (Mac Power) (especially Microsoft word 95, 98 and 2000)

- 1. Aldus (For Drawing)
- 2. Chemdraw (For Drawing)
- 3. Igor (For Graphing and Data Analysis)
- 4. MacDraw (For Drawing)
- 5. Super paint (For Drawing)
- 6. Kaildagraph (For Data Analysis)
- 7. Cricket graph and etc. (For Data Analysis and Graphing)

Expérimental Techniques:

UHV and Surface Science Techniques:

- 1. X-ray Photoelectron Spectroscopy (XPS)
- 2. Auger Electron Spectroscopy (AES)
- 3. Angle Resolved Ultra Photoelectron Spectroscopy (UPS or ARUPS)
- 4. Lower Electron Energy Diffraction (LEED)
- 5. X-ray Photoelectron Diffraction (XPD)

Microscopic Techniques:

- 1. Scanning Electron Spectroscopy (SEM) (Cryogenic and Room Temperature)
- 2. Transmission Electron Spectroscopy (TEM) (Cryogenic and Room Temperature)
- 3. Atomic Force Microscopy (AFM)

Synchrotron Radiation Techniques:

- 1. Resonant Photoemission Spectroscopy (RPES)
- 2. Angle Resolved Ultra Photoemission Spectroscopy (ARUPS)
- 3. X-ray Absorption Fine Spectroscopy (XAFS)
- 4. X-ray Micro-probe X-ray Absorption Spectroscopy (XAFS)

Analytical and Solid State Techniques:

- 1. X-ray Diffraction (XRD)
- 2. Energy Dispersive Analysis X-ray (EDAX)

- 3. X-ray Fluorescence Spectroscopy (XRFS)
- 4. Quadruple Mass Spectroscopy (QMS)
- 5. FTIR (Infrared)
- 6. Laser (Nd-YAG Laser)
- 5. Thermo-gravimetric Analysis (TGA)
- 6. Differential Thermal Analysis (DTA)
- 8. Differential Scanning Calorimetry (DSC)
- 9. Elemental Analysis (Exeter Analytical)
- 10. Gas Chromatography (GC)
- 11. Gas Chromatography / Mass Spectroscopy (GC/MS)
- 12. Pyroprobe / Pyrolysis

Magnetic Measurement Techniques:

- 1. Superconducting Quantum Interface Devices (SQUIDs)
- 2. Vibrating Sample Magnetization (VSM)

Optical Techniques:

1. Optical Absorption Spectroscopy (OAS)

Worked in Synchrotron Radiation Centers:

- 1. CRCL lab. Dares bury, Warrington, Cheshire, UK (1991-1996)
- 2. Synchrotron Radiation Research Center (SRRC), Hsinchu, Taiwan, (1996-1999)
- 3. Berlin Electron Storage Ring Company for Synchrotron Radiation (BESSY II) (2000)
- 4. Advance Photon Sources (APS), Chicago, USA (2001-2004).

PROFESSIONAL MEMBERSHIP:

- 1. American Association of Naval Engineers (ASNE), Virginia, USA
- 1. American Chemical Society (ACS), USA
- 2. American Physical Society (APS), USA.
- 3. American Institute of Chemical Engineering (AIChE), USA
- 4. International Union of Pure and Applied Chemistry (IUPAC), USA
- 5. Canadian Society for Chemistry (CSC), Canada
- 6. Chemical Institute of Canada (CIC), Canada
- 7. American Council on Renewable Energy (ACORE), USA
- 8. Cleantech Forum International, USA
- 9. Connecticut Technology Council (CTC), Hartford, CT, USA
- 10. Alliance for Clean Energy of New York (ACENY), Albany, NY, USA
- 11. National Fire Protection Association (NFPA), USA
- 12. Society of Automobile Engineering (SAE) International, USA
- 13. Society of Plastics Engineers (SPE), USA
- 14. Vermont Renewable Energy, Vermont, USA
- 15. TechConnect World, USA
- 16. Nano Science and Technology Institute (NSTI), USA
- 17. National Recycling Coalition, Inc, USA
- 18. Solid Waste Association of North America (SWANA), USA

- 19. New York Academy of Sciences, New York, USA
- 20. International Chemical Engineering, London, UK
- 21. Talent, Innovative and Entrepreneur (TIE), Detroit, Michigan, USA
- 21. New Energy New York (Associate Member), Albany, New York, USA
- 22. Sierra Club, California, USA
- 23. Greenpeace International, USA
- 24. Bangladesh Chemical Society (Life Member), Dhaka, Bangladesh
- 25. Advanced Photon Sources User Group (APS), Chicago, USA
- 26. Canadian Institute for Neutron Scattering (CINS), Ottawa, Canada
- 27. UMIST Alumni Association, UMIST, Manchester, UK
- 28. Chittagong University Alumni, Chittagong, Bangladesh
- 29. Fellow, International Congress of Environmental Research, Bhopal, India.
- 30. Renewable Energy and Efficiency Business Association, (REEBA), CT, USA.
- 31. Connecticut Venture Group (CVG), CT, USA.
- 32. Association of Consumer Growth (ACG), CT, USA.

PATENTS:

- 1. METHOD FOR CONVERTING WASTE PLASTIC TO LOWER-MOLECULAR WEIGHT HYDROCARBONS, PARTICULARLY HYDROCARBON FUEL MATERIALS, AND THE HYDROCARBON MATERIAL PRODUCED THEREBY by Moinuddin Sarker (USA Patent (Patent Pending) : Serial # 12/471717)
- 2. METHOD FOR CONVERTING WASTE PLASTIC TO LOWER-MOLECULAR WEIGHT HYDROCARBONS, PARTICULARLY HYDROCARBON FUEL MATERIALS, AND THE HYDROCARBON MATERIAL PRODUCED THEREBY by Moinuddin Sarker (Patent Cooperation Treaty (PCT) (International Patent (Patent Pending)): Application # PCT/US09/03200))

LIST OF BOOKS PUBLISHED

- **1.** Moinuddin Sarker*, "Municipal Waste Plastic Conversion into Different Category of Liquid Fuel" has been accepted for publication in the book "Air Quality / Book 3", ISBN 978-953-307-570-9 (Published).
- **2. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, **Municipal Waste Plastics to Different Categories of Fuel,** ISBN: **978-3-659-11347-5, 2012,** LAP LAMBART Academic Publishing GmbH&Co. KG. www.get-morebooks.com

BOOK UNDER REVIEW

1. Author: Moinuddin Sarker*, Co-Authors: Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, 'A Comparison Study of Environmentally Hazardous HDPE Waste Plastic and Standard HDPE Plastic to Fuel Production Process', http://www.scirp.org/

- 2. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, '' Alternative Liquid Hydrocarbon Fuel Production Experimental Comparative Study for LDPE Waste and LDPE Standard Plastic'', http://www.intechopen.com/
- 3. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, '' Alternative Liquid Hydrocarbon Fuel Production Comparative Study for Polypropylene Waste and Standard Plastic'' http://www.sapub.org

PUBLICATIONS UNDER REVIEW:

- 1. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman 'First Simple and Easy Process of Thermal Degrading Municipal Waste Plastics into Fuel Source', Journal of Energy Conversion and Management, Publish through Elsevier Journals, http://ees.elsevier.com/ecm/
- 2. Moinuddin Sarker*, Mohammad M. Rashid, Mohammed Molla and Md. S. Rahman, ''
 MUNICIPAL WASTE PLASTICS PRODUCING LIQUID HYDROCARBON
 FUEL ENERGY / HYDROGEN BY USING THERMAL CRACKING PROCESS",
 WEEC-2011, Journal of AEE publication www.aee.org
- 3. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, ''High Energy Content Liquid Hydrocarbon Fuel Produced from Municipal Solid Waste Plastic of PP-5 and PS-6 by using Thermal Cracking Process with Activated Carbon'', Journal of Renewable and Sustainable Energy. Publish through American Institution of Physics. www.aip.org
- **4.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman, "Method of Converting Municipal Proportional Waste Plastics into Liquid Hydrocarbon Fuel by using Activated Carbon" Fuel Processing Technology, http://ees.elsevier.com/fpt/
- **5.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman, **''Thermolysis of Municipal Waste Plastics''**, The International Journal of Recycling of Organic Waste in Agriculture, (Manuscript ID 1583932584747920) published through www.springer.com Open journal
- **6.** Moinuddin Sarker *, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman, 'Sustainable valorization of municipal wastes plastic for fuel energy with environmental safety via medium temperature thermolysis process', International Journal of Renewable Energy Technology, Published through www.inderscience.com
- 7. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and

Mohammed Molla, '' Chemical Products Produced from High Density Polyethylene (HDPE) Waste Plastic'' International Journal of Materials Sciences, Publish through www.academicpub.org

- 8. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, 'Polypropylene Waste Plastic Conversion into Fuel Oil using Thermal Degradation with Fractional Process', Indian Journal of Science and Technology, http://indjst.org/manu.html
- 9. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, "Low Density Polyethylene (LDPE) Waste Plastic Transform into Renewable Heavy Fuel by Using Thermal Cracking", Manuscript ID = NEJ-2012-06-OA-0707. Naval Engineers Journal, http://mc.manuscriptcentral.com/nej
- 10. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, "Renewable Diesel Fuel Generated from High Density Polyethylene (HDPE) Waste Plastic by Using Fractional Distillation Process" in The International Journal of Engineering Research and Technology (IJERT). PAPER CODE #: IRPH- 12502 IJERT http://www.ripublication.com/irph/ijert.htm
- 11. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, "Municipal Solid Waste Plastics and Calcium Carbonate (CaCO3) Mixture Turned into Liquid Hydrocarbon Fuel Energy", (No. 31-2012), European Chemical Bulletin in Section B: Materials and Environmental Sciences, http://eurchembull.com/

FINAL FOR PUBLICATION

- 1. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman, ''Halogenated Hydrocarbon Compound Fuel Produced from PVC and PP Waste Plastic'', The International Journal of Energy Engineering (Publish through www.ij-ee.org)
- 2. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, "Transforming Fuel from Municipal Waste Plastic by using of Nickel Silica {Ni (SiO2)} Catalyst", International Journal of Chemical, Environmental and Pharmaceutical Research (ijcepr) publish through www.ijcepr.com
- 4. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, "Aromatic Light Hydrocarbon Fuel Generation from Municipal Polystyrene (PS) Waste Plastic by using Low Temperature Fractional Distillation Process" The International Journal of Environmental Protection, publish through www.worldacademicpub.org
- 5. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and

- Mohammed Molla, 'Environmentally Harmful Low Density Waste Plastic Conversion into Kerosene Grade Fuel' Journal of Environmental Protection, Publish through www.papersubmission.scirp.org
- **6.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, **''Thermal Conversion of Waste Plastics (HDPE, PP and PS) to Produce Mixture of Hydrocarbons''**, American Journal of Environmental Engineering, Vol.2, No.4, August 2012, http://www.manuscriptsystem.com/author/paperlist.aspx, sapub.org
- 7. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, '' High Density Polyethylene (HDPE) Waste Plastic Conversion into Alternative Heavy Fuel for Heavy Vehicle '', in the Journal of Environmental Research and Development, NS/1973/12, http://jerad.org/introduction.php
- **8.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, '' Thermal conversion of polymer wastes (LDPE) into hydrocarbon diesel fuel without cracking catalysts'', IJPAST-398/6/12, in the International Journal of Pure and Applied Sciences and Technology, www.ijopaasat.in
- **9.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, **''Polystyrene (PS) Waste Plastic Conversion into Aviation /Kerosene Category of Fuel by Using Fractional Column Distillation Process''**, IJEE-672-05062012, International Journal of Energy and Environment, publish through www.IJEE.IEEFoundation.org
- 10. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, 'Production of Valuable Heavy Hydrocarbon Fuel Oil by Thermal Degradation Process of Post-Consumer Municipal Polystyrene (PS) Waste Plastic in Steel Reactor' Manuscript Number: 101800041, Journal of Energy and Power, Vol.2, No.4, August 2012, http://www.sapub.org
- **11.** M. Sarker*, M. M. Rashid M. S. Rahman & M. Molla, "Low and High Density Polyethylene Waste Plastics Conversion into Liquid Hydrocarbon Fuel" Journal of Sustainability/Green Chemistry, Chemistry Today.net or THE INTERNATIONAL JOURNAL OF CHEMISTRY AND BIOTECHNOLOGY (Published through www.teknoscienze.com)
- **12.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman **''Alternative Naphtha Grade Fuel Produced from Polypropylene (PP) Waste Plastic by using Distillation Process''**, Journal of Thermal Energy and Power Engineering, (TEPE) . http://www.academicpub.org/tepe/journalpapersub/Author/PaperList.aspx
- **13.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, **None Coded Waste Plastics Conversion into Fuel,** International Journal of Engineering Research and Applications, http://www.ijera.com/, Your manuscript id is 24673

- **14.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, **''Randomly Mixture of Waste Plastics Conversion into Fuel by using Leftover Residue'',** World Research Journal of Environment and Waste Management, http://www.bioinfo.in/application/index.php
- 15. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, '' Production of Aromatic Hydrocarbons Naphtha Chemical by thermal Degradation of Polystyrene (PS) Waste Plastic'', American Journal of Climate Change, http://papersubmission.scirp.org/global/index.html
- **16.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman," Conventional Naphtha Chemical Produced From Municipal Solid Low Density Polyethylene (LDPE) Waste Plastic" in the International Journal of Applied Chemistry (IJAC). PAPER CODE #: RIP- 17469 IJAC * www.rippublication.com
- 17. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla, "Polypropylene (PP) Waste Plastic into Light Fractional Gasoline Grade Fuel for Vehicle by using Two Step Thermal Process" International Journal of Forest, Soil and Erosion (IJFSE), http://www.ijfse.com/index.php/IJFSE
- 18. Moinuddin Sarker*, Mohammad M Rashid, Mohammed Molla, "First Waste Plastic Conversion into Liquid Fuel by using Muffle Furnace through Reactor", International Journal of Energy Engineering, www.sapub.org

LIST OF PUBLICATIONS

- 1 Moinuddin Sarker *, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman, '' A New Technology Proposed to Recycle Waste Plastics into Hydrocarbon Fuel in USA '' volume 3, issue 5, pp.749-760, 2012. International Journal of Energy and Environment, publish through www.IJEE.IEEFoundation.org
- 2. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman, "Unconventional Liquid Fuel from Municipality Waste Plastic Mixture of Polystyrene (PS) and Low Density Polyethylene (LDPE)", International Journal of Applied Environmental Science, Volume 7, Number 4 (2012), pp. 415-426, published through www.rippublication.com
- **3.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman '' Conventional Fuel Generated from Polypropylene (PP) Waste Plastic like Kerosene/Jet/ Aviation Grade with Activated Carbon '', submitted paper id: 24129, International Journal of Modern Engineering Research (IJMER), Vol.2, Issue.4, July-Aug. 2012 pp-2168-2173.
- **4.** M. Sarker*, M. M. Rashid, M. S. Rahman and M. Molla, "Fractional Distillation Process Utilized to Produce Light Fractional Fuel from Low Density Polyethylene (LDPE) Waste Plastic." The Open Fuels & Energy Science Journal, 2012, 5, 39-46, DOI: 10.2174/1876973X01205010039.

- 5. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman, and Mohammed Molla, '' Thermal Conversion of Waste Polyolefin of PS to Low Sulfur Diesel Grade Fuel with Activated Carbon by Fractional Process '', International Journal of Chemical and Analytical Science, 2012, 3(6), 1425-1329.
- **6.** *Moinuddin S., PhD, Mohammad M. R., M. Sc. Muhammad S. R., M. Sc. & Mohammed M., B. Sc., ''JET CATEGORY FUEL PRODUCED FROM HIGH DENSITY POLYETYLENE (HDPE) WASTE PLASTIC BY USING THERMAL CRACKING WITH FRACTIONAL DISTILLATION COLUMN PROCESS '', Transnational Journal of Science and Technology, June 2012 edition vol. 2, No.5, pp:1-11.
- 7. Moinuddin Sarker *, Mohammad Mamunor Rashid, Mohammed Molla and Muhammad Sadikur Rahman'' Light Hydrocarbons Produced from High Density Polyethylene (HDPE) Waste using Fractional Column Distillation'' International Journal of Scientific & Engineering Research (IJSER), volume 3 issue 5, (2012), pp:1-10 publish through www.ijser.org
- **8.** Moinuddin Sarker, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammad Molla'' **Alternative Diesel Grade Fuel Transformed from Polypropylene (PP) Municipal Waste Plastic Using Thermal Cracking with Fractional Column Distillation'** Journal of Energy and power Engineering, **2012**, **4**, **165-172**, doi:10.4236/epe.2012.43023
- **9.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman '' Heavy Oil Produced from Municipal Mixed Waste Plastics by Fractional Distillation Process '' BIOINFO Renewable and Sustainable, Volume 2, Issue 1, 2012, pp: 05-11.
- **10.** Moinuddin Sarker, Mohammad Mamunor Rashid, Mohammad Molla and Ashiquz Zaman "Conversion of Municipal Waste Plastic into Liquid Hydrocarbon Fuel Using a Stainless Steel Reactor" Journal of Environmental Science and Engineering, volume 1, no. 5A, (2012) 721-726, (Published through David Publishing.org)
- **11.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Md. Sadikur Rahman, **Short and Long Chain Hydrocarbon Transformed from Waste Plastics** ", International Journal of Chemical Engineering Research (IJChER), Volume 4, Number 2 (2012), pp. 79-90. Publish through www.ripublication.com
- 12. Moinuddin Sarker*, Mohammad Mamunor Rashid, Muhammad Sadikur Rahman and Mohammed Molla '' Thermal Degradation of PVC & Mixed Waste Plastics to Produce Mixture of Hydrocarbon Fuel, Journal of Applied Chemical Science 2012, Vol. 1 issue 2: 9-17, Publish through www.jacsonline.org
- 13. Moinuddin Sarker*, Mohammad Mamunor Rashid & Mohammad Molla ''Waste Polypropylene (PP) Plastic Conversion into Liquid Hydrocarbon Fuel for Producing

Electricity and Energies' **DOI:** 10.1080/09593330.2012.676075, Journal of Environmental Technology (Published through Taylor and Francis Journal)

- **14.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Md. Sadikur Rahman and Mohammed Molla, '' **Conversion of Low Density Polyethylene (LDPE) and Polypropylene (PP) Waste Plastics into Liquid Fuel Using Thermal Cracking Process''** British Journal of Environment & Climate Change 2(1): 1-11, 2012 ,publish through http://www.sciencedomain.org/journals.php
- **15.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla & Md. Sadikur Rahman '' **High Density Polyethylene (HDPE-2) and Polystyrene (PS-6) Waste Plastic Mixture turns into Valuable Fuel Energy''** The Journal of International Scientific Publication: Materials, Methods & Technologies, Volume 5, Part 2, pp: 379-386 (2012), Published through www.science-journal.eu
- **16.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Md. Sadikur Rahman and Mohammed Molla ''Liquid Fuel Obtain from Polypropylene (PP-5) and High Density Polyethylene (HDPE-2) Waste Plastics Mixture'' The Journal of International Scientific Publication: Materials, Methods & Technologies, Volume 5, Part 2, pp: 368-378 (2012), Published through www.science-journal.eu
- 17. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman '' Un-Proportional Municipal Waste Plastic Conversion into Fuel using Activated Carbon and HZSM-5 Catalyst'' The Journal of Applied Chemical Science 2012, Vol. 4 issue 1: 1-8 (publish through www.jacsonline.org)
- **18.** M. Sarker*, M. M. Rashid, M. Molla and M. S. Rahman 'Waste Plastics influence on Environment & Its Solution to Create an Alternate Energy Source' Vol. 29, n. 6, P: 50-51, November/December 2011, Journal of Green Chemistry, chimica oggi/Chemistry Today (Published through www.chemistrytoday.teknoscienze.com/index.asp)
- 19. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammad Molla & Md. Sadikur Rahman '' Waste Polystyrene (PS-6) Plastic Conversion into Liquid Hydrocarbon Fuel by using HZSM-5 catalyst with Thermal Degradation Process'' September 2011, (Vol. 3 N. 5) The Journal of International Review of Chemical Engineering (I.RE.CH.E.), (Published through Praise Worthy Prize S.r.l.)
- **20.** Moinuddin Sarker*, Mohammad Mamunor Rashid and Md Sadikur Rahman "Agricultural waste plastics conversion into high energy liquid hydrocarbon fuel by thermal degradation process" Journal of Petroleum Technology and Alternative Fuels Vol. 2(8), pp. 141-145, Accepted 7 July, 2011 and published **August 2011** (published through at http://www.academicjournals.org/JPTAF ©2011 Academic Journal)
- **21.** M. Sarker*, M.M. Rashid and M. Molla **''Municipal Waste Plastics Conversion into Aviation Fuel''** Received: September 17, 2010 / Accepted: January 07, 2011 / Published: **July 31, 2011**, Journal of Energy and Power Engineering 5 (2011) 620-626 (Published through David Publishing)

- 22. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla, Md. Sadikur Rahman ''Different Types of Fuel Produce from Municipal Solid Mixed Waste Plastics by Fractional Distillation with Thermal Cracking Process'' Manuscript received and revised June 2011, accepted July 2011, Journal of International Review of Chemical Engineering (I.RE.CH.E.), Vol. 3, N. 4 Page: 449-456 (Publish through Praise Worthy Prize S.r.l.)
- **23.** M. Sarker, M.M. Rashid and M. Molla "**Power Generation from Municipal Solid Waste Plastics**" Received: September 14, 2010 / Accepted: January 07, 2011 / Published: **June 30, 2011**, Journal of Energy and Power Engineering 5 (2011) 489-494, (Published through David Publishing)
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- **25.** Moinuddin Sarker, Md. Sadikur Rahman, Mohammad Mamunor Rashid and Mohammed Molla" **Waste Sneaker Conversion into Liquid Hydrocarbon Fuel"** volume 5, Number 5 pp. 583-588, **May 2011** the Journal of Materials Science and Engineering (USA). (Published through David Publishing)
- **26.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla "Liquid Hydrocarbon Fuel Conversion from Abundant Solid Waste Low Density Polyethylene (LDPE-4) Plastics" (Paper ID-5149), Journal of International Review of Chemical Engineering (I.RE.CH.E.), Vol. 3, N. 3, (340-349) **May 2011** (Published through Praise Worthy Prize S.r.l.)
- **27.** M. Sarker*, M.M. Rashid and M. Molla ''Waste Plastic Conversion into Hydrocarbon Fuel Materials'', Received: August 13, 2010 / Accepted: September 21, 2010 / Published: May 20, 2011. Journal of Environmental Science and Engineering, 5 (2011) 603-609, (Published through David Publishing)
- **28.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Ashiquz Zaman and Mohammad Molla "Alternative Gasoline Produce from Abundant Solid Waste Plastics" pp. 394-399, volume 5, number4, April **2011**, the Journal of Materials Science and Engineering (USA). (Published through David Publishing)
- **29.** M. Sarker*, M.M. Rashid and M. Molla "Waste Plastic Conversion into Hydrocarbon Fuel like Low Sulfur Diesel" Received: October 8, 2010 / Accepted: December 8, 2010 / Published: April 20, 2011, Journal of Environmental Science and Engineering, 5 (2011) 446-452, (Published through David Publishing)
- **30.** M. Sarker * "Alternative Fuels Derived from Solid Waste Plastics" Received: August 3, 2010 / Accepted: October 20, 2010 / Published: March 20, 2011, Journal of

Environmental Science and Engineering, 5 (2011) 316-322, (Published through David Publishing)

- **31.** M. Sarker*, M.M. Rashid and M. Molla 'New Renewable Source of Energy from Municipal Solid Waste Plastics' Received: September 24, 2010 / Accepted: November 2, 2010 / Published: March 20, 2011, Journal of Environmental Science and Engineering, 5 (2011) 309-315, (Published through David Publishing)
- **32.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Ashiquz Zaman and Mohammed Molla "**Thermal and Catalytic Conversion of Waste Plastics into Hydrocarbon Materials**" Received: August 21, 2010 / Accepted: September 21, 2010 / Published: **March 10, 2011**, Journal of Materials Science and Engineering 5 (2011) 298-303 (Published through David Publishing)
- **33.** Moinuddin Sarker*, Mohammad Mamunor Rashid, and Mohammed Molla 'Waste Plastic Conversion into Chemical Product Like Naphtha' Received 7 January 2011; Accepted **12 February 2011**, Vol. 1 (2011), Article ID R110101, 6 pages, Journal of Fundamentals of Renewable Energy and Applications, (Published through Ashdin Publishing)
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- **40.** Review of Application of High Temperature Superconductors. **M. M. Sarker** and W. R. Flavell, J. of Superconductivity, 11, (1998), pp209-211.
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- **44.** Angle-resolved photoemission of Y-doped Bi2Sr2CaCu2O8+x. W.R. Flavell, A.G. Thomas, S. Squire, M. Mian, **M. M. Sarker**, J. F. Howlett, Z. Hashim, H.R. Aghabozorg, P.L. Wincott, S. Downes and L. Leonyuk, Surface Science, 352-354, (1996), pp 788-792
- **45.** Resonant Photoemission from complex cuprates and nickelates. W.R. Flavell, J. Hollingworth, J.F. Howlett, A.G. Thomas, **M. M. Sarker**, S. Squire, Z. Hasim, M. Mian, P. L. Wincott, D. Teehan, S. Downes and F.E. Hancock, The Journal of Synchrotron Radiation, 2, (1995), pp 264-271.
- **46.** Metal-to-non-metal transitions in complex oxides. W.R. Flavell, A.G. Thomas, **M. M. Sarker,** M. Mian, J.F. Howlett, H.R Aghabozorg, Z. Hashim, S. Squire, J. Hollingworth, S. Warren, P.L. Wincott, L. Leonyuk, D. Teehan, S. Downes and K.C. Cheung, DRAL Annual reports 1994/95.
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BOOK UNDER PREPARATION

- 1. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, "Renewable Liquid Hydrocarbon Fuel Production with Comparison of PS waste plastic and Standard PS plastic"
- 2. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, 'Fractional Hydrocarbon Fuels Grade (Gasoline, Naphtha Chemical, Aviation Fuel, Diesel, and Fuel Oil) Produced from Polypropylene and Polystyrene Waste Plastic'.
- **3. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' **PS and LDPE to 5 Fractional Fuels** ''
- **4. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' **PS and HDPE to 5 Fractional Fuels** ''
- **5**. **Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' **PP and LDPE to 5 Fractional Fuels** ''
- **6. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, 'PP and HDPE to 5 Fractional Fuels '
- **7. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' **HDPE and LDPE to 5 Fractional Fuels** ''

BOOK CHAPTER UNDER PREPARATION

- 1. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, ''HDPE, PS and LDPE waste plastic to 5 Fractional Fuels''
- 2. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, '' HDPE, PP and LDPE waste plastic to 5 Fractional Fuels''
- 3. Author: Moinuddin Sarker*, Co-authors: Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, "PP, PS and LDPE waste plastic to 5 Fractional Fuels"
- **4. Author:** Moinuddin Sarker*, **Co-authors:** Mohammad Mamunor Rashid, Mohammad Molla and Md. Sadikur Rahman, '' **PP, PS and HDPE waste plastic to 5 Fractional Fuels**''

MANUSCRIPT UNDER PREPARATION

1. Investigation of Oxidation of a ZnS Deposition on GaP(001) Substrate M. M. Sarker, A. B. Preobrajenski, K. Grebhardt, T. Chassé and R. Szargan (manuscript in preparation).

- **2.** Au LIII edge of Au/Pd/Fe/GaAs thin films studies by XAFS **M. M. Sarker**, R. A. Gordon, E. D. Crozier, P. Budnik (Manuscript in Preparation).
- **3.** Heavy Metal Ion in Floc Studies by XAFS **M. M. Sarker,** R. A. Gordon, E. D. Crozier, L. Bendell-Young, G. Kruzynski, (Manuscript in Preparation).
- **4.** Metal Ion in Oyster Studies by XAFS. **M. M. Sarker,** R. A. Gordon, E. D. Crozier, L. Bendell-Young, G. Kruzynski, (Manuscript in Preparation)
- 5. Moinuddin Sarker *, Mohammad Mamunor Rashid, Md. Sadikur Rahman and Mohammed Molla, "Crude Oil Produce from all Types of Municipal of Waste Plastics",
- 6. M. Sarker*, M. M. Rashid, M. Molla & Md. S. Rahman, '' Polyvinyl Chloride (PVC) Waste Plastic Conversion into Fuel using by Zinc Oxide (ZnO) Catalyst and Activated Carbon'',
- 7. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, ''Motor Vehicle Tire Conversion into Fuel by using Thermal Degradation Process'',
- 8. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, "Tire and Low Density Polyethylene Conversion into Fuel by using Thermal Cracking Process",
- 9. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' Catalytic Conversion in High Density Polyethylene and Tire'',
- **10.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman ''Vehicle Tire and PP Conversion into Fuel'',
- 11. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' Conversion of Hazardous Polystyrene Waste Plastic and Motor Vehicle Tire into useful Chemical Products'',
- 12. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, ''Thermal and Catalytic Degradation of Motor Vehicle Tire and commingled Waste Plastics''
- 13. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' Differential Grade Fuels Produced from Polystyrene and Polypropylene Waste Plastic''.
- 14. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, "De-chlorination of PE, PP, PS, PET and PVC Waste Plastic Conversion into Oil"

- 15. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, 'PET and PVC Conversion into Fuel by using Metal Catalyst'
- 16. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, "Fuel Produced from municipal PVC and PS Waste Plastics"
- 17. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' Polyethylene (LDPE) and PVC turns into Chlorinated Hydrocarbon Fuel for Refinery ''
- 18. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, "Polyvinyl Chloride and High Density Polyethylene Convert into Oil by using FeOH catalyst"
- 19. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' PS and PET Turns into Oil for Refinery Industry ''
- **20.** Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, 'PET and LDPE Fuel Production Process'
- 21. Moinuddin Sarker*, Mohammad Mamunor Rashid, Mohammed Molla and Md. Sadikur Rahman, '' HDPE and PETE Conversion into Hydrocarbon Fuel Oil''
- 22. Moinuddin Sarker*, Mohammad Mamunor Rashid and Muhammad Sadikur Rahman "Municipal Solid Waste Plastics and 10% Calcium Carbonate (CaCO₃) Mixture Turned into Liquid Hydrocarbon Fuel Energy".

CONFERENCE PROCEDINGS

- 1. Generation of Transportation Fuel from Solid Municipal Waste Plastics. **Moinuddin Sarker**, Conference Proceeding at the **SAE** 2010 World Congress in the Cobo Convention Center, Detroit, Michigan, USA on April 13-15, 2010.
- 2. New Alternative Energy from Solid Waste Plastics, **Moinuddin Sarker**, ASM Din Mohammed, Mohammad M. Rashid, Nicholas Schiralli, Ashiquz Zaman, Aminul Kabir, Sadikur Rahman, Kamrul Islam, and Mohammad Molla, Conference Proceeding at 1st International Conference on the Developments in Renewable Energy Technology [ICDRET'09], Dhaka, Bangladesh on December 17-19, 2009.
- 3. Aviation Fuel Derived from Waste Plastics, **Moinuddin Sarker**, Conference Proceeding at SAE 2009 AeroTech Congress & Exhibition, Washington State Convention and Trade Center, Seattle, Washington, USA on November 10-12, 2009
- 4. CONVERTING WASTE PLASTIC TO HYDROCARBON FUEL MATERIALS. **Moinuddin Sarker**, Conference Proceeding at WORLD ENERGY ENGINEERING CONGRESS in Washington Convention Center, Washington, DC, USA on November 4-6, 2009.

- 5. Method for Converting Waste Plastic to Hydrocarbon Fuel Materials. **Moinuddin Sarker**, Conference proceeding to Clean Technology Conference and Expo 2009 in Houston, Texas on May 3-7 2009.
- 6. Anomalous Magnetic properties of the 2212 type rare earth Cuprates Bi2Sr2RCu2O8+d (R= Pr, Gd and Y).
- T. I. Hsu, Y.Y. Hsu, J.U. Lin, Y.H. Toh, **M. M. Sarker**, and H. C. Ku, Proceeding of the 12th Conference on Magnetic and Magnetism Technology, Taiwan, July 1997

AWARDS

During my school education I have received a scholarship for my brilliant result, which was exemption of my tuition fees, and support for buying books and other expenditures.

December 7th & 8th 2010

Association of Energy Engineers committee has selected Dr. Moinuddin Sarker to receive the 2010 International Renewable Energy Innovator of the Year Award and the 2010 Regional Renewable Energy Innovator of the year award. Dr. Sarker has already received the award from AEE, USA on 8th December 2010 at Washington DC, USA. Please see the link:

http://www.aeecenter.org/files/newsletters/Insight/March2011/AEE%202010%20International%20Awards.pdf

30th September 2010

For recognition for its outstanding achievement of converting solid waste plastics to fuels technology, NSR was awarded the Innovation Pipeline Award 2010 "companies to watch" at the Connecticut Technology Council at OMNI Hotel New Haven, CT, held on September, 30 2010.

17th September 2009

For recognition for its outstanding achievement of converting solid waste plastics to fuels technology, NSR was awarded the Innovation Pipeline Award 2009 "companies to watch" at the Connecticut Technology Council at OMNI Hotel New Haven, CT, held on September, 17 2009.

20-23 April, 2009

As recognition of NSR's innovative technology for converting solid waste plastics to fuels, NSR has received the AEI 2009 Tech Award by the Society of Automobile Engineering International at the SAE World Congress and Expo in Detroit, Michigan held on 20-23 April, 2009. I am the inventor of the technology. The Honorable California and Michigan Governors were present in the conference and expo show of SAE World Congress and Expo 2009.

AWARDED FELLOWSHIP AND SCHOLARSHIPS:

2000

ICSC-World Fellowship, ICSC - World Laboratory, Chemin de, Mornex, 32 CH-1003 Lausanne, SWITZERLAND.

During my tenure in Leipzig University, Germany on 2000, I had been granted for Postdoctoral Fellowship position from ICSC- World Laboratory in Switzerland and research work would have done under the supervision and guidance of **Prof. Kai M. B. Siegbahn (Nobel Prize Winner), who had been awarded for Nobel Prize in Physics on 1981** and executive director of World Laboratory in Lausanne, Switzerland and working in Uppsala University, Sweden. Especially Prof. K. M. B. Sieghbahn had decided proffer the fellowship for me. This is a world recognized prestigious fellowship and acknowledgment for extra ordinary accomplishment in the field of surface and material sciences.

There are five Noble Prize Winners in Chemistry and Physics are founding Scientist of World Laboratory and some reputed and world distinguished Professors / Scientists / Researchers are involved with World Laboratory. Professor A. Salam (Nobel Prize Winner in Physics on 1979) was too founding scientist of World Laboratory.

January, 2000- October 2000

DFG (German Physical Society) Fellowship, Leipzig, Germany.

1997-1999

National Science Council Research Fellowship, Taiwan, Republic of China (R.O.C).

1996-1997

National Science Council Research Fellowship, Taiwan, Republic of China (R.O.C).

1994-1995

Charles Wales Overseas Scholarship, Education Ministry of Bangladesh, Dhaka, Bangladesh and Bangladesh High Commission in London, UK

1993-1994

UMIST Overseas Student Fellowship, UMIST, Manchester, UK.

ORAL / TECHNICAL PRESENTATIONS:

- 1. New Alternative Vehicle Fuels from Abundant Solid Waste Plastic, Oral Presentation, PACIFICHEM 2010 Honolulu, Hawaii, USA, Date: December 15-20, 2010 **Link: www.pacifichem.org**
- **2.** New Renewable Source of Energy from Municipal Solid Waste Plastics Oral Presentation, XXI World Energy Congress (WEC) 2010, Montreal, CANADA Date: December 12-16, 2010

Link: www.wecmontreal2010.ca

3. New Alternative Vehicle Fuels from Solid waste Plastics, World Energy Engineering Congress. **Moinuddin Sarker**, 2010, Washington D.C., Technical Paper Presentation, Date: December 8-10, 2010

Link: www.aeecenter.org

4. Various Categories of Hydrocarbon Fuels derived from Municipal Waste Plastics. **Moinuddin Sarker**, GPC 2010 - World Power train Expo (GPC – North America), Technical Paper Presentation , MSU Management Center, Troy, Michigan, USA, Dated: November 3-4, 2010

Link: www.gpc-icpem.org

5. Compatible Power Train Fuel from Municipal Solid Waste Plastic. **Moinuddin Sarker**, GPC 2010 - World Power train Expo (GPC- Europe, Munich, Germany), Sheraton West Park Hotel, Munich, Germany, Technical Paper Presentation, Dated: September 22-23, 2010

Link: www.gpc-icpem.org

6. New Alternative Vehicle Fuels from Solid waste Plastics, 3rd International IUPAC Conference on Green Chemistry, 2010, Westin Ottawa Conference Venue, Ottawa, Ontario, Canada, Oral Presentation, Date: August 15-18, 2010

Link: www.icgc2010.ca

7. Waste Plastic Conversion into New Source of Energy, 5th International Conference on Environmental Science and Technology 2010, America Academy of Science, Houston, TX, Oral Presentation, Date: July 12-16, 2010

Link: www.aasci.org

8. Alternative Fuels Derived from Solid Waste Plastic, Air & Waste Management. **Moinuddin Sarker** Association's Annual Conference and Exhibition, Technical Paper Publication, Calgary, AB, CA

Dated: June 22-25, 2010 Link: www.awma.org

9. Municipal Waste Plastic to Alternative Energy, TechConnect World 2010 Conference and Expo, Anaheim Convention Center, Anaheim, California, U.S.A, Oral Presentation Date: June 21-24, 2010

Link: www.techconnectworld.com

10. Renewable Source of Energy from Waste Plastics. **Moinuddin Sarker,** Federation of New York Solid Waste Associations Solid Waste/Recycling Conference & Trade Show Technical Paper Presentation, Sagamore, NY, Dated: May 16-19,2010

Link: www.nyfederation.org

11. Alternative to Gasoline, Diesel & Fuel Oil Derived from Waste Plastic. **Moinuddin Sarker, Mamunor Rashid, Ashiquz Zaman & Mohammad Molla.** Technical Paper Publication. 18th European Biomass Conference and Exhibition from Research to Industry, Markets, Lyon Convention Centre, France, Date: 3-7 May 2010

Link: www.conference-biomass.com

12. Waste Plastic Conversion into New Source of Energy. **Moinuddin Sarker**, 3rd Annual Waste-to- Fuel Conference & Trade Show, 2010, Jacksonville, Florida, Technical Paper Presentation, Dated: April 18-20, 2010

Link: www.waste-to-fuel.com

13 Generation of Transportation Fuel from Solid Municipal Waste Plastics, SAE 2010 World Congress and Exhibition, Detroit, Michigan, USA, Written & Oral Presentation Dated: April 12-14 2010.

Link: www.sae.org

14. New Alternative Source of Energy Generation from Municipal Solid Waste Plastic. **Moinuddin Sarker, Mamunor Rashid, Ashiquz Zaman & Mohammad Molla.** 2010 AIChE Spring Meeting, San Antonio, TX, Technical Paper Presentation, Dated: March 21-25, 2010

Link: www.aiche.org/spring

15. New Alternative / Renewable Source of Energy from Solid Waste Plastics. **Moinuddin Sarker.** 13th Annual EUEC 2010 Conference and Expo, Phoenix Convention Center, Phoenix, Arizona, Technical Paper Presentation, Dated: February 1-3, 2010 **Link: www.euec.com**

16. Aviation Fuel Derived from Waste Plastics at SAE2009 AeroTech Congress & Exhibition in Seattle, Washington, USA on November 10-12, 2009.

Link: http://www.sae.org/events/atc/index.htm

17. CONVERTING WASTE PLASTIC TO HYDROCARBON FUEL MATERIALS at WORLD ENERGY ENGINEERING CONGRESS (WEEC) 2009 in Washington DC, USA on November 4-6, 2009.

Link: http://www.energycongress.com

18. Conversion of Municipal Solid Waste Plastics to Liquid Fuels at TiECon2009 Midwest in the Ritz-Carlton, Dearborn, MI, USA on October 23-24, 2009.

Link: http://www.tieconmidwest.org/

19. Job Creation through Waste Plastics to Liquid Fuel Conversion Technology at Economic Development Corporation (EDC), Oakland County, Michigan, USA on 22nd October, 2009.

Link: http://www.oakgov.com/globaloakland/business services/edc projects.html

20. Waste Plastic Converting into High Energy Content Liquid Fuel at American Chemical Society Northeast Regional Meeting at Hartford, CT, USA on 7-10 October 2009.

Link: http://membership.acs.org/n/nerm/

21. Alternative Energy Derived From Solid Waste Plastics at Cleantech Forum XXIII in Boston, MA, USA, on 8-10th September 2009.

Link: http://cleantech.com/cleantechforum/boston09

22. Waste Plastic Converting into Hydrocarbon Fuel Materials at 8th World Congress of Chemical Engineering (WCCE8) in Montreal, Canada on 23-27th August, 2009.

Link: http://www.wcce8.org/index.html

23. Converting Waste Plastic to Alternate and Renewable Source of Energy at National Research Council of Canada (NRC), in Institute for Fuel Cell Innovation, 4250 Westbrook Mall, Vancouver, B.C. V6T 1W5, Canada on 20th July 2009.

Link: http://www.nrc-cnrc.gc.ca/eng/index.html
http://www.nrc-cnrc.gc.ca/eng/ibp/ifci.html
http://www.nrc-cnrc.gc.ca/eng/programs/ifci/program.html

24. Converting Waste Plastic to Liquid Fuel at Transportation Center R&D, Argonne National laboratory, 9700 S Cass Avenue, 362/H208, Argonne, IL 60439-4815 on June 23, 2009.

Link: http://www.transportation.anl.gov/

25. Method for Converting Waste Plastic to Hydrocarbon Fuel Materials at Environmental Protection Agency (EPA), Washington, DC on 05-19-2009.

Link: www.epa.gov

26. Method for Converting Waste Plastic to Hydrocarbon Fuel Materials, at Clean Technology Conference and Expo 2009, Nanotech Conference and Expo 2009, TechConnect Conference, Summit and Expo 2009 in George R Brown Convention Center, Houston, Texas on 6th May 2009.

Link: http://www.ct-si.org/Cleantech2009/abs.html?i=10121

- 27. Waste Conversion (Plastics Converted in to Fuel), Natural State Research, Inc, Stamford, CT, USA on 1st September 2005.
- 28. Scanning Micro-probe XAFS Study of Iron Oxides in Oyster Digestive Processes. Department of Chemistry, University of Sherbrooke, Quebec, Canada on 15th December 2003.
- 29. Investigation of Oxidation of a ZnS Deposition on GaP (001) Substrate Membrane Reactor Technology Inc. Stadium Road, UBC, BC, Canada, 14th February 2003.
- 30. Introductions and Fabrication of Quantum Dots Department of Physics, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK, 9th October 2001.
- 31. Introduction of Quantum Dots Solid State Physics Department, University of Groningen, the Netherlands, 19th April 2001.
- 32. Investigation of Oxidation of a ZnS Deposition on GaP (001) Substrate Wilhelm-Ostwald-Institute of Physical and Theoretical Chemistry, Department of Chemistry & Mineralogy, University of Leipzig, Germany, October 30, 2000
- 33. Modifications and Characterization of Epitaxial ZnS Layers on GaP (001) Substrate

Solid State Physics Department, University of Groningen, the Netherlands, 3rd July 2000.

- 34. Characterization of Epitaxial Growth and Interface Structure of ZnS on GaP(001) Substrate. Institute of Physical and Electrochemistry, Department of Chemistry, University of Hanover, Germany, 30th June 2000
- 35. Characterizations and Modification of Epitxial ZnS Layers Department of Chemical Engineering, University of Amsterdam, the Netherlands, 5th June 2000.
- 36. Electronic Structure Studies of Cuprate Superconductors by Resonant Photoemission Wilhelm-Ostwald-Institute of Physical and Theoretical Chemistry, Department of Chemistry & Mineralogy, University of Leipzig, Germany, May 08, 2000.
- 37. Characterizations and Modification of Epitaxial ZnS Layers. X. Workshop des Grauiertenkollegs (GK) "Physikalische Chemie der Grenzlächen, in der Wilhelm-Ostwald-Gedenkstäte, Grossbothen, Germany, March 31 April 1, 2000
- 38. EXAFS Studies of the High Temperature Superconducting Oxides. Wilhelm-Ostwald-Institute of Physical and Theoretical Chemistry, Department of Chemistry & Mineralogy, University of Leipzig, Germany, February 21, 2000.
- 39. X-ray Absorption Studies on the High Temperature Superconducting Oxides. North South University, Kamal Ataturk Avenue, Dhaka, Bangladesh, 19th August 1999.
- 40. X-ray Absorption Studies on the Bi2Sr2Ca1-xYxCu2O8+d System. Magnetic and Magnetic Technology at the National Tsing Hua University, Hsinchu, Taiwan, Republic of China, July 9th-11th, 1998.
- 41. X-ray Absorption Studies on Bi2Sr2Ca1-xYxCu2O8+d. The Annual Meeting of the Chinese Physical Society, at the National Central University, Chung-Li, Taiwan, Republic of China, 5-6th Feb., 1998
- 42. Surface Electronic Structure and Solid State Chemistry of Y-Doped Bi-2212 System. Synchrotron Radiation Research Center (SRRC) at Hsinchu, Taiwan, Republic of China, 25th February 1997
- 43. Surface Chemistry of High Temperature Superconducting Oxides. Department of Chemistry, UMIST, Manchester, UK, 11th February 1995.
- 44. Surface Chemistry of High Temperature Superconducting Oxides. Department of Chemistry, UMIST, Manchester, UK, 11th February 1993.

POSTER PRESENTATION:

1. NSR Technology: Waste Plastic Conversion into Alternate Energy Poster Presentation, PACIFICHEM 2010, Honolulu, Hawaii, USA December 15-20, 2010

Link: www.pacifichem.org

2. Catalytic Conversion of Waste Plastic into Diesel

Poster Presentation, PACIFICHEM 2010, Honolulu, Hawaii, USA, December 15-20, 2010

Link: www.pacifichem.org

3. Generation of Transportation Fuel from Solid Municipal Waste Plastics Poster Presentation, XXI World Energy Congress (WEC) 2010, Montreal , CANADA Date: September 12-16, 2010

Link: www.wecmontreal2010.ca

4. Waste Plastic Converting into Hydrocarbon Fuel Materials

Poster Presentation, XXI World Energy Congress (WEC) 2010, Montreal, CANADA

Date: September 12-16, 2010 Link: www.wecmontreal2010.ca

5. Generation of Transportation Fuel from Solid Municipal Waste Plastics, TechConnect World 2010 Conference and Expo, Anaheim Convention Center, Anaheim, California, U.S.A, Poster presentation, Date: June21-24, 2010

Link: www.techconnectworld.com

6. New Alternative Fuel from Solid Waste Plastic, 2010 SBIR National Conference, The Connecticut Convention Center, Hartford, CT, USA, Poster Presentation, Dated: April 21-23, 2010

Link: www.SBIRnational.com

7. Alternate Sources of Energy in the forms of Liquid Fuel from Solid Waste Plastics at Environmental Monitoring, Evaluation, and Protection (EMEP) Meeting in Albany Marriot, Albany, New York, USA on 14-15th October, 2009.

 ${\bf Link: \underline{http://www.nyserda.org/programs/Environment/EMEP/conference_2009/index.asp.}$

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8. Alternate Sources of Energy in the forms of Liquid Fuel from Solid Municipal Waste Plastics at Naval Energy Forum Meeting in Hilton McLean Tysons Corner McLean, Virginia, USA on 14-15 October 2009.

Link: http://www.onr.navy.mil/conferences/naval-energy-forum/default.aspx

Link: http://www.onr.navy.mil

9. Technology that Produces Fuel <u>AND</u> Cleans Pollution: Liquid Fuel from Municipal Waste Plastics at Connecticut Technology Council in OMNI Hotel New Haven, CT, USA on September, 17 2009.

Link: http://www.ctipa.org/

Link: http://www.ct.org/Innovation_Pipeline.asp

LIST OF CONFERENCE EXHIBIT:

1. WASTECONE 2009 at the Long Beach Convention Center in Long Beach, CA. USA on September 22-24, 2009.

NSR has exhibited a booth in that conference and please see the link below (**Booth** # **1046**):

Link: http://wastecon.swana.org
Link: http://www.swana.org

2. The International Plastics Showcase (NPE2009) in McCormick Place in Chicago, IL, USA on June 22-26, 2009. Link: http://www.npe.org

NSR has exhibited a booth in that conference and please see the link below (**Booth** # **W122054**):

Link:

http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09

3. Clean Technology Conference and Expo 2009, Nanotech Conference and Expo 2009, TechConnect Conference, Summit and Expo 2009 at George R Brown Convention Center, Houston, Texas on 3rd-7th May 2009.

NSR has exhibited a booth in that conference and please see the link below (Booth # 1215): Link: http://www.techconnect.org/World2009/expo/exhibitors.html

Natural State Research, Inc has presented at Technical paper at the conference entitle:

Method for Converting Waste Plastic to Hydrocarbon Fuel Materials

Link: http://www.ct-si.org/Cleantech2009/abs.html?i=10121

There are 5000 attendees from 70 countries including where executives from Fortune 500 companies. **Link:** http://www.techconnect.org/World2009

4. Society of Automobile Engineering International (SAE) World Congress and Expo 2009 in Detroit, Michigan on 20-23rd April 2009 (http://www.sae.org/congress).

NSR has exhibited a booth in that conference and please see the link below http://www.sae.org/servlets/virtualExhibit?OBJECT_TYPE=VirtExhibitInfo&PAG
E=virtexcompany&dirtype=166291&CID=13847332

The Honorable California and Michigan Governors were present in the conference and expo show of SAE World Congress and Expo 2009.

There are Total Registrants 15,828, Exhibitors, 344 Companies, Total Square Feet, 79,900, Sponsors, 28 Companies in SAE World Congress 2009 in Detroit, MI, USA

OTHER NATIONAL AND INTERNATIONAL CONFERENCES ATTENDED:

- 1. Bilateral Cooperation for a Cleaner Tomorrow, USA Trade Mission to Tuscany. Villa La Pietra, Florance, Italy. Date: 6-7th of October, 2010.
- 2. XXIst World Energy Congress Montreal 2010. 740 Norte-Dame Street, 8th Floor, Montreal, Quebec, Canada. Date: September 12 to 16, 2010
- 3. TechConnect World 2010 Conference and Expo, Anaheim Convention Center, Anaheim, California, U.S.A, Date: June 21-24, 2010

Link: www.techconnectworld.com

3. Federation of New York Solid Waste Associations Solid Waste/Recycling Conference & Trade Show Sagamore, NY, Dated: May 16-19,2010

Link: www.nyfederation.org

4. 2010 SBIR National Conference, The Connecticut Convention Center

Hartford, CT, USA, Dated: April 21-23, 2010

Link: www.SBIRnational.com

5. 3rd Annual Waste-to- Fuel Conference & Trade Show, 2010, Jacksonville, Florida,

Dated: April 18-20, 2010

Link: www.waste-to-fuel.com

6. SAE 2010 World Congress and Exhibition, Detroit, Michigan, USA, Dated: April 12-

14 2010

Link: www.sae.org

7. 2010 AIChE Spring Meeting, San Antonio, TX, Dated: March 21-25, 2010

Link: www.aiche.org/spring

8. 13th Annual EUEC 2010 Conference and Expo

Phoenix Convention Center, Phoenix, Arizona

Dated: February 1-3, 2010

Link: www.euec.com

9. SAE2009 AeroTech Congress & Exhibition in Washington State Convention and

Trade Center, Seattle, Washington, USA on November 10-12, 2009.

Link: http://www.sae.org/events/atc/index.htm

10. WORLD ENERGY ENGINEERING CONGRESS (WEEC) 2009 in Washington

Convention Center, Washington DC, USA on November 4-6, 2009.

Link: http://www.energycongress.com

11. 22nd NREL Industry Growth Forum at the Grand Hyatt Hotel in Downtown Denver,

Denver, Colorado, USA on November 3-5, 2009.

Link: http://www.cleanenergyforum.com

12. Talent, Innovative and Enterprise (TIE), TiECon2009 Midwest in the Ritz-Carlton,

Dearborn, MI, USA on October 23-24, 2009.

Link: http://www.tieconmidwest.org/

13. Naval Energy Forum Meeting in Hilton McLean Tysons Corner McLean, Virginia,

USA on 14-15 October 2009.

Link: http://www.onr.navv.mil/conferences/naval-energy-forum/default.aspx

Link: http://www.onr.navy.mil

14. The American Chemical Society Northeast Regional Meeting in Hilton Hotel, Hartford, CT, USA on 7-10 October 2009.

Link: http://membership.acs.org/n/nerm/

15. WASTECONE 2009 at the Long Beach Convention Center in Long Beach, CA. USA on September 22-24, 2009.

Link: http://wastecon.swana.org
Link: http://www.swana.org

16. Connecticut Technology Council in OMNI Hotel New Haven, CT, USA on September, 17 2009.

Link: http://www.ctipa.org/

Link: http://www.ct.org/Innovation_Pipeline.asp

17. Cleantech Forum XXIII in Boston Convention Center, Boston, MA, USA, on 8-10th September 2009.

Link: http://cleantech.com/cleantechforum/boston09

18. 8th World Congress of Chemical Engineering (WCCE8) in Montreal Convention Center, Montreal, Canada on 23-27th August, 2009.

Link: http://www.wcce8.org/index.html

19. Fourth Annual New Energy Symposium organized by New Energy New York and the Energy & Environmental Technology Applications Center (E2TAC) at the College of Nanoscale Science and Engineering (CNSE) at the World Trade Center in New York City, NY. July 8-9, 2009.

Link: http://www.neny.org/nes/2009/home

http://www.e2tac.org

http://cnse.albany.edu/index.cfm

20. The International Plastics Showcase (NPE2009) in McCormick Place in Chicago, IL, USA on June 22-26, 2009. Link: http://www.npe.org

NSR has exhibited a booth in that conference and please see the link below (**Booth** # **W122054**):

Link:

http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_v4_01.cfm?SHOW_ID=NPE09http://www.mapyourshow.com/shows/mys_v4_01/mys_01/mys_v4

21. Clean Technology Conference and Expo 2009, Nanotech Conference and Expo 2009, TechConnect Conference, Summit and Expo 2009 at George R Brown Convention Center, Houston, Texas on 3rd-7th May 2009.

NSR has exhibited a booth in that conference and please see the link below (**Booth # 1215**): Link: http://www.techconnect.org/World2009/expo/exhibitors.html

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Method for Converting Waste Plastic to Hydrocarbon Fuel Materials

Link: http://www.ct-si.org/Cleantech2009/abs.html?i=10121

There are 5000 attendees from 70 countries including where executives from Fortune 500 companies. Link: http://www.techconnect.org/World2009

- 22. The 2009 U.S. Department of Energy (DOE) Hydrogen Program and Vehicle Technologies Program Annual Merit Review and Peer Evaluation Meeting at Crystal Gate Way Marriot, May 18–22 in Arlington, Virginia. Link: http://annualmeritreview.energy.gov/index.cfm
- 23. Society of Automobile Engineering International (SAE) World Congress and Expo 2009 in Detroit, Michigan on 20-23rd April 2009 (http://www.sae.org/congress).

NSR has exhibited a booth in that conference and please see the link below http://www.sae.org/servlets/virtualExhibit?OBJECT_TYPE=VirtExhibitInfo&PAG
E=virtexcompany&dirtype=166291&CID=13847332

The Honorable California and Michigan Governors were present in the conference and expo show of SAE World Congress and Expo 2009.

There are Total Registrants 15,828, Exhibitors, 344 Companies, Total Square Feet, 79,900, Sponsors, 28 Companies in SAE World Congress 2009 in Detroit, MI, USA

- 24. Biomass 2009: Fueling Our Future (http://www.biomass2009.com) on March 17 and 18, 2009 at the Gaylord National in National Harbor, Maryland, USA and arranged by The U.S. Department of Energy Office of Energy Efficiency and Renewable Energy's Biomass Program. There are couple of Senators, Congressman and Secretaries of Energy were present on that conference
- 25. SAE International Government/Industry Meeting (http://www.sae.org/events) at Walter E. Washington Convention Center, Washington, DC, USA on February 3-6, 2009.
- 26. The SBIR National Conference 2008 (http://www.ccat.us/sbir_conference_08) at Connecticut Convention Center, Harford, CT, USA on November 11-14, 2008.
- 27. Corporate / Business Social Responsibility (<u>www.bsr.org</u>) BSR 2008 Annual Conference, Grand Hyatt Hotel, New York City, New York, USA, 4th -7th November 2008. There are 1400 Chief Executives from USA and around the world (from 50 counties) were participated at the conference
- 28. ACE NY FALL MEMBERSHIP MEETING & CONFERENCE (<u>www.aceny.org</u>) at the Desmond Hotel & Conference Center, 660 Albany Shaker Road, Albany, New York, USA, on October 21-22, 2008.
- 29. WORLD ENERGY ENGINEERING CONGRESS 2008 ((WEEC08) (http://www.energycongress.com) at Gaylord National Resort & Convention Center, Washington, DC, USA, on October 1-3, 2008.

- 30. Cleantech Forum XVIII, (http://www.cleantech.com/cleantechforum/dc08/) in Washington, DC, at Omni Shoreham, Washington, DC, USA, on September 15-17, 2008
- 31. New Energy Symposium and Solar Expo 2008 at the College of Nano-scale Science and Engineering and E2TAC (http://www.nyas.org/events) at University of Albany, Albany, New York, USA on 9-10th July 2008.
- 32. 5th Anniversary Renewable Energy Finance Forum (REFF) (http://www.reffwallstreet.com), Wall Street at The Waldorf Astoria, New York City, NY, USA on 18-19th June 2008.
- 33. New York Venture Capital Event and Workshop (http://www.fundingpost.com) at 1290 Avenue of America, New York, NY, USA, on June 5 2008.
- 34. 2nd Annual Distribution Energy Conference by Renewable Energy Vermont (http://www.revermont.org/distributed energy 2008.html) at Stratton Mountain Resort, Vermont, USA on 15th May 2008.
- 35. Corporate / Business Social Responsibility (<u>www.bsr.org</u>) BSR 2007 Annual Conference, Grand Hyatt Hotel, San Francisco, California, USA, October 23-26, 2007. There are 1400 Chief Executives from USA and around the world (from 50 counties) were participated at the conference.
- 36. Corporate / Business Social Responsibility (<u>www.bsr.org</u>) BSR 2006 Annual Conference, Grand Hyatt Hotel, New York City, New York, USA, 7th -10th November 2006. There are 1400 Chief Executives from USA and around the world (from 50 counties) were participated at the conference.
- 37. Alternate Energy in New York: Expo 2006 at Hyatt Regency Rochester, Rochester, New York, on 26th June 2006 (US Senator Hillary Rodham Clinton were present in the conference).
- 38. Corporate / Business Social Responsibility (www.bsr.org) BSR 2005 Annual Conference, Omni Hotel, Washington DC, USA, 1st -4th November 2005. There are 1500 Chief Executives from USA and around the world (from 50 Counties) including World Bank President Mr. Paul Wolfowitz were participated at the conference.
- 39. Bi-annual Material Science Center Vlieland Meeting, Vlieland, The Netherlands, 22^{nd} - 24^{th} April 2001.
- 40. Annual FOM meeting at the Veldhoven, Eindoven, The Netherlands, December 19-20, 2000.
- 41. AOFA-11 Conference at the Wilhelm-Ostwald-Institute of Physical and Theoretical Chemistry,
- Department of Chemistry & Mineralogy, University of Leipzig, Germany, September 24-28, 2000.

- 42. The Second Joint Meeting of the World-Wide Chinese Physicist in Honour of Prof. a-You Wu on the Occasion of His 90th Birthday at Academia Sinica, Taipei, Taiwan, Republic of China, 11th –15th August, 1997. There are couples of Chinese Nobel Prize Winners in Physics and Chemistry was been in attendance at the conference.
- 43. Taiwan International Conference on Superconductivity and 5th Workshop on Low Temperature Physics at Department of Physics, Academia Sinica, Taipei, Taiwan, Republic of China, 13th-16th August, 1997.
- 44. Taipei International Symposium on Surfaces and Thin Films at Institute of Atomic Molecular Sciences (IAMS), Taipei and Synchrotron Radiation Research Center (SRRC), Hsinchu, Taiwan, Republic of China, 25th-28th March, 1997.
- 45. 1996 Synchrotron Radiation Research Center (SRRC) User's Meeting at Synchrotron Radiation Research Center (SRRC), Hsinchu Science-Based Industrial Park, Hsinchu, Taiwan, Republic of China, 13th-14th November 1996
- 46. 4th International Conference on Materials and Mechanism of Superconductivity High-Temperature Superconductors at Grenoble, France, 5th-9th July 1994. **The Scientists and Researchers from 40 countries around the world were participated at the conference.**
- 47. 13th European Conference on Surface Science at Department of Physics, University of Warwick, Warwick, Coventry, UK, 30th August-4th September, 1993.
- 48. Solid State Chemistry and Superconductivity International Conference at Department of Chemistry, King's College, University of Aberdeen, Scotland, UK, 15th-17th July 1992.

COURSES AND TRAINING ATTENDED

- 1. OSHA 10 hour outreach Course/ Training done by Practical Safety Solutions, LLC, PO Box 792, 50 Browns Lane, Old Lyme, CT 06371, USA on 25th February, 2009
- 2. First aid/CPR and the fire extinguisher training done / conducted by Practical Safety Solutions, LLC, PO Box 792, 50 Browns Lane, Old Lyme, CT 06371, USA on 24th February, 2009
- 3. Developing and Managing a Successful Technology and Product Strategy, MIT Sloan School of Management, MIT, MA, USA on 3rd-5th December 2008 (**Conducted by Sloan School of Management, Massachusetts Institute of Technology (MIT), MA, USA).**
- 4. Advanced GC/MS-TurboMass/TurboMass Gold GC/MS Operator Training at Natural State Research, Inc., Stamford, CT, USA, on 8th-9th January 2008.
- 5. Managing Technical Professionals and Organizations Training Course at Hyatt Regency Hotel, Cambridge, Massachusetts, USA on 17-18th 2007 (Conducted by Sloan School of Management, Massachusetts Institute of Technology (MIT), MA, USA).

- 6. Introduction to Thermo-gravimetric Analysis (TGA), Training Course at Perkin Elmer Life and Analytical Sciences. Shelton, CT, USA on 17th-18th August 2006.
- 7. GC/MS-TurboMass/TurboMass Gold GC/MS Operator Training at Perkin Elmer Life and Analytical Sciences. Shelton, CT, USA on 6th-9th June 2006.
- 8. 16 Hours Hazardous Waste Management Course at Cleanharbours Environmental Services (Training Center), Kingston, MA, USA on 11-13th May 2006.
- 9. Occupational Safety and Health Authority (OSHA), Ten-hour General Industry Outreach Training Program held in Natural State Research, Inc. Stamford, CT, USA on 8-9th November 2005.
- 10. Thermal Analysis Course by TA Instrument held in Doubletree Hotel, Somerset, NJ, USA on 20th May 2005.
- 11. Advanced Algorithms at the Department of Mathematics Computer Science, University of Groningen, Groningen, the Netherlands, April-October 2001.
- 12. Language Programming (C++ and Java) at the Department of Mathematics and Computer Science, University of Groningen, Groningen, the Netherlands, April-October 2001
- 13. Introduction of Electronics Course for New Post Graduate Students at Department of Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK, October, 1991.
- 14. Basic Vacuum Technology Course for New Postgraduate Students in Surface Sciences at the University of York, York, UK, November 1991

Editor-in-Chief for International Journal

1. World Research Journal of Physical Chemistry
Associate-Editor
http://bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000141&detail=editoria
http://bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000141&detail=editoria
http://bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000141&detail=editoria

2. International Journal of Chemical Research

http://www.bioinfo.in/contents.php?id=23&page=editorial

3. World Research Journal of Environment and Waste Management http://www.bioinfo.in/contents.php?id=293&page=editorial

Editorial Board Member for International Journal

 Transnational Journal of Science and Technology http://tjournal.org

- **2.** International Journal of Pure and Applied Sciences and Technology www.ijopaasat.in
- **3.** International Journal of Environmental Sciences and Research (IJESR)

GlobalSkope Publishing Society, http://globalskope.com

- **4.** Thermal Energy and Power Engineering (TEPE) www.academicpub.org
- **5.** International Journal of Mechanical Engineering and Research http://www.ijmer.org/
- **6.** International Journal of Modern Engineering Research http://www.ijmer.com/
- 7. International Journal of Power and Energy Systems http://www.actapress.com
- **8.** Journal of Applied Chemical Science www.jacsonline.org
- **9.** The Journal of Fundamentals of Renewable Energy and Applications

http://www.ashdin.com/journals/jfrea/jfrea.aspx

10. Korean Journal of Chemical Engineering

http://www.springer.com/chemistry/journal/11814?detailsPage=editorialBoard

11. Research and Reviews International Journals (RESEARCH & REVIEWS: JOURNAL OF ENGINEERING AND TECHNOLOGY, RESEARCH & REVIEWS: JOURNAL OF MATERIAL SCIENCES, RESEARCH & REVIEWS: JOURNAL OF CHEMISTRY, RESEARCH & REVIEWS: JOURNAL OF PURE AND APPLIED PHYSICS.

http://www.rroij.com/

12. International Journals of Engineering & Sciences (IJENS)

http://ijens.org/IJENS-Researchers%20Promotion%20Group.html

13. International Journal of Advanced Science and Engineering Technology

http://www.ijaset.com/

14. International Journal of Energy and Environment (IJEE)

http://www.ijee.ieefoundation.org/

Reviewer for International Journal

- 1. International Journal of Renewable Energy Research (IJRER) http://www.ijrer.org
- 2. http://www.sciencedomain.org/journals.php
- **3.** African Journal of Agricultural Research www.academicjournals.org/ajar
- **4.** International Journal of Scientific & Technology Research http://www.ijstr.org/
- International Journal of Energy Engineering (IJEE)
 World Academic Publishing Company
 http://www.ij-ee.org/
- **6.** The International Journal of Energy Science www.academicpub.org
- 7. American Institute of Physics www.aip.org
- **8.** The International Journal of Environmental Science and Technology www.ijest.org (Springer)
- **9.** Clean Technologies and Environmental Policy http://www.springer.com/environment/sustainable+development/journal/10098?detailsPage=editorialBoard

YOUTUBE INTERVIEW:

Moinuddin Sarker was interviewed on the Tieconmidwest 2009 Michigan conference by Mateen Syed regarding the NSR technology. Interview available for viewing at: http://www.youtube.com/watch?y=Z9T4mrD8VPO

MEDIA COVERAGE:

- 1. http://www.aeecenter.org/i4a/pages/index.cfm?pageID=3820
- 2. http://www.waste-management.ca/environmental_news.html?print=true&

- 3. http://www.thinkenergy.com/trade/aa1140715.html
- 4. http://advanceddecisions.com/judis-blog/index.php/2010/05/18/one-of-my-favorite-innovative-ct-companies/
- 5. http://www.prlog.org/10803918-nsrs-dr-moinuddin-sarker-receives-the-aees-2010-renewable-energy-innovator-of-the-year-award.html
- 6. http://www.younoodle.com/startups/moinuddin_sarker_phd_mcic
- 7. http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId = 106916161
- 8. http://www.facebook.com/note.php?note_id=124775427541065
- 9. http://rpn.baumpub.com/news/805/new-formula-to-make-liquid-fuel-from-waste-plastic
- 10. http://www.ct.org/Member_News.asp
- 11. http://siliconinvestor.advfn.com/readmsg.aspx?msgid=26509601
- 12. http://investing.businessweek.com/businessweek/research/stocks/private/snapshot.asp?privcapId=106916161
- 13. http://rpn.baumpub.com/search/?search=Natural+State+Research&submit.x=33&submit.y=17
- 14. http://cleantechventureday.com/presenting.html
- 15. http://boardreader.com/thread/Pyrolysis of the Municipal Mixed Plastic 5kh8h X8h.html
- 16. http://www.huskers-gear.com/watch
 http://www.huskers-gear.com/watch
 video/Z9T4mrD8VPQ/tieconmidwest2009/Dr Moinuddin Sarker
 video/Z9T4mrD8VPQ/tieconmi
- 17. http://www.earthtimes.org/articles/press/innovator-of-the-year-award,1387100.html
- 18. http://www.youtube.com/watch?v=Z9T4mrD8VPQ
- 19. http://www.younoodle.com/startups/moinuddin_sarker_phd_mcic
- 20. http://www.highbeam.com/doc/1G1-229228700.html?key=01-42160D517E1A166011080A18066E4B2E224E324D3417295C30420B61651B617F137019731B7B1D6B39

OTHER SCIENTIFIC DUTIES (During PhD Studies)

1992-1996

Supervising the M. Sc. (Course) Students for their practical works at Department of Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK.

1991-1996

Group Monitor for SEM and EDAX at Department of Chemistry, University of Manchester Institute of Science and Technology (UMIST), Manchester, UK

OTHER SOCIAL ACTIVITIES:

1. Founding President of Dr. Moinuddin Sarker Foundation (www.moinuddinfoundation.org) in Daudkandi, Comilla, Bangladesh. Moinuddin Foundation is helping and providing Scholarship for poor and merit students to buying their books and other expenditure in Junior High School level. It is a monthly based scholarship and providing free computer in junior high school level to learn and get basic idea of computer. It has also number of different project to be implemented including helping and providing support for destitute and oppressed women, widows, orphanages, disable peoples, vocational training, free treatment, free medicine (minimum) and microcredit loan (interest free) and lot of other projects.

Reference will be provided upon request.