CURRICULUM VITAE

Dr. Md. Forhad Mina

PERSONAL DATA

Name	: Md. Forhad Mina
Father's Name	: Late Md. Abdur Razzak Mina
Date of Birth	: 14th June, 1968
Nationality	: Bangladeshi
Marital Status	: Married
Sex	: Male
Spoken languages	: Bengali, English and Japanese

ACADEMIC QUALIFICATION

D. Sc.	:	Materials Science, Graduate School of Science and Engineering, University of Shizuoka, Japan, 1999.
M. Sc. (Thesis Group)	:	Physics, Department of Physics, University of Dhaka, Bangladesh, 1989, 1st class 3rd position.
B. Sc. (Hons.)	:	Physics, Department of Physics, University of Dhaka, Bangladesh, 1988, 1st class 4th position.

PRESENT POSITION

Professor: Department of Physics, Faculty of Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000.

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PROFESSIONAL BACKGROUND

Professor	***:***	Department of Physics, Faculty of Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, 23 August, 2014– To-date
Associate Professor	***:***	Department of Physics, Faculty of Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, 23 November, 2010– 11 May, 2015.
Assistant Professor	***:***	Department of Physics, Faculty of Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, 21 August, 2007– 22 September, 2010.
Senior Scientific Officer	***:***	Bangladesh Atomic Energy Commission, Dhaka, 01 March, 2005 – 20 August, 2007
Scientific Officer	***:***	Bangladesh Atomic Energy Commission, Dhaka, 11 January, 2000 – 28 February, 2005.
Teaching Staff	***:***	American International University Bangladesh 01 June, 1999 – 10 January, 2000.

PREVIOUS RESEARCH BACKGROUND

Postdoctoral Research Fellow	**:**	Faculty of Chemical and Natural Resources Engineering, University Malaysia Pahang, Malaysia. February 2012 - January, 2013.
	:	Departamento de Fisica Macromolecular, Instituto de Estructura de la Materia, CSIC, Madrid, Spain, September 2002 - August, 2003
Postdoctoral JASSO Fellow	***:***	Department of Physics, Faculty of Science, University of Shizuoka, Japan, September - November, 2005
Visiting Scientist	***:***	Department of Materials Science, Martin Luther University, Halle-Wittenberg, Germany, 2003
Research Student	***:***	Department of Physics, Faculty of Science University of Shizuoka, Japan, October 1994-March, 1996
Research Fellow	***:***	Department of Physics, Faculty of Science University of Dhaka, January - June, 1994

FIELD OF EXPERTISE

- Studies on crystallization, phase transition, surface morphology and mechanical, micromechanical, thermal, electrical and other properties of soft condensed matters (polymeric, organic and biological substances, viz. synthetic and natural polymers, polymer blends and composites, polymer hydrogels, liquid crystalline materials, etc.).

EXPERIMENTAL TECHNIQUES AND INSTRUMENTS USED

Fabrication Techniques:

01. Preparation of polymeric materials with gradient properties using the method of Temperature Slope Crystallization (TSC).
02. Preparation of solution grown crystals.
03. Production of cold- and hot-drawn samples of crystalline and amorphous polymers, Natural and synthetic rubbers.
04. Production of solution and melt cast blends.
05. Preparation of hot- and cold rolled samples of polymers.
06. Preparation of hydrogels by radiation crosslinked method for medical applications.
07. Fabrication and development of bioplastics from renewable resources.
08. Synthesis of nanomaterials.
09. Fabrication of polymeric nanocomposites with nanofiller reinforcement.
10. Fabrication and development of polymeric composites reinforced with natural fibers.
11. Modification of natural fibers by nanoparticle impregnation.

Characterizing Techniques:

01. Calorimetric studies using a Differential Scanning Calorimeter (DSC) or Differential thermal Analyzer (DTA) and Thermal analyses by TGA, TMA, DMA etc.
02. Study of crystal structure by both X-ray Diffraction (XRD) and neutron scattering (NS) methods; Dynamic simultaneous wide- and small- angle x-ray scattering studies using Synchrotron Radiation.
03. Measurement of electrical/dielectric properties.
04. Optical Microscopy, Atomic Force Microscopy, Scanning Electron Microscopy, Field Emission Scanning Electron Microscopy and Transmission Electron Microscopy.
05. Microhardness measurements of polymers *in situ* using a dynamic microindentation tester.
06. Mechanical and Dynamic mechanical tests.
07. UV-visible spectroscopy, Fourier-transform infrared spectroscopy, Atomic absorption spectroscopy, etc.
08. Contact angle, Density, Melt flow index etc. measurements.

LIST OF PUBLICATIONS

Book:

01. T. Asano, **M. F. Mina** and Y. Fujiwara, A Survey of Polymer Crystallization by X-ray Diffraction, SKP Inc., Shizuoka, Japan, ISBN 978-4-9903540-01-7, Printed (2006).

02. **M. F. Mina**, T. A. Mobarak and M. J. Rahman, Physics Part I and II, Text Books for Higher Secondary Education, Approved by NCTB, Alam Book House (Jupitar Publications), Dhaka, Bangladesh, Printed (2015).

Book Chapter:

01 M. D. H. Beg, **M. F. Mina**, R. M. Yunus and A. K. M. Moshiul Alam, "Oil Palm Empty Fruit Bunch Fibers Reinforced Composites", In: Biofiber reinforcements in composite materials, Ed. Omar Faruk and Mohini Sain, UK, Woodhead Publishing Limited, Woodhead Publishing Series in Composites Science and Engineering No. 51, ISBN 978-1-78242-122-1, August, (2014).

Articles: [Refereed Journals with Impact Factor (IF): 2013/2014]

01. T. Asano, **M. F. Mina** and I. Hatta, Twin Formation Mechanism in the Solid-Solid Phase Transition of Normal Hexatriacontane, ***Journal of the Physical Society of Japan***, 65, 1699-1704, (1996). **IF=1.475**.

02. **M. F. Mina**, T. Asano, H. Takahashi, I. Hatta, K. Ito and Y. Amemiya, Dynamic Investigation of the Solid-Solid Phase Transition of Normal-Alkane (Hexatriacontane) by Simultaneous Measurement with Differential Scanning Calorimetry, Small-Angle X-ray Scattering and X-ray Television Detector, ***Japanese Journal of Applied Physics,*** 36, 5616-5622,(1997). **IF=1.057**.

03. T. Asano, F. J. Baltá Calleja, A. Flores, M. Tanigaki, **M. F. Mina**, C. Sawatari, H. Itagaki, H. Takahashi and I. Hatta, Crystallization of Oriented Amorphous Poly(ethylene terephthalate) as Revealed by X-Ray Diffraction and Microhardness, ***Polymer***, 40, 6475-6484,(1999). **IF=3.766**.

04. T. Asano, Y. Yamamoto, **M. F. Mina**, Y. Fujiwara, H. Takahashi and I. Hatta, Melting Behavior of the Oriented β-phase Polypropylene Texture Crystallized by the Temperature Slope Method*,* ***Journal of Macromolecular Science-Physics***, B38, 163-175, (1999). **IF=0.619**.

05. **M. F. Mina**, T. Asano, R. Nuryadi, C. Sawatari, H. Takahashi and I. Hatta, Effect of Homologous Impurity on the Solid-Solid Phase Transition of Normal-Alkane (Hexatriacontane) Crystal Studied by Time-Resolved X-Ray Measurements, ***Japanese Journal of Applied Physics***, 38, 164-170, (1999). **IF=1.057**.

06. T. Asano, **M. F. Mina**, A. Nishida, S. Yoshida and Y. Fujiwara, Crystallization of a low molecular weight Polyethylene and Paraffins under a Temperature Gradient*,*

Journal of Macromolecular Science-Physics, B40 (3&4), 355-367, (2001). **IF=0.617**.

07. **M. F. Mina**, T. Asano, N. C. Dafader, F. Akthar, S. Yoshida, N. Tohyama, K. Imaizumi, Effect of Monomers in the Structural Modification of Natural Rubber during γ-Ray Irradiation, ***Journal of Macromolecular Science-Physics***, B43 (2), 295-305, (2003). **IF=0.617**.

08. M. Boyonova, **M. F. Mina**, F.J. Baltá Calleja and S. Fakirov, Effect of SBS Compatibilzer on the Interphase Boundary of Polymer Blends of Polystyrene and Natural Rubber, ***e-polymers***, 047,1-7, (2003). **IF=0.33**.

09. M. M. Alam, **M. F. Mina** and F. Akthar, Effect of Gamma Rays in the Preparation of Polymer and Hydrogel from Acrylamide Monomer, ***Chinese Journal of Polymer Science***, 21(4), 437-442, (2003). **IF=1.420**.

10. M. M. Alam, **M. F. Mina** and F. Akthar, Swelling and Hydration Properties of Acrylamide Hydrogel in Distilled Water, ***Polymer Plastic Technology & Engineering***, 42 (4), 533-542(2003). **IF=1.481**.

11. **M. F. Mina**, M. M. Alam, F. Akthar, S. Yoshida, N. Tohyama, K. Imaizumi and T. Asano, Centrifuging Effect on the Structure and Property of Natural Rubber Latex Films, ***Polymer Plastic Technology & Engineering***, 42 (4**)**, 513-514, (2003). **IF=1.481**.

12. M. M. Alam, F. Akthar, **M. F. Mina**, N. C. Dafader and A. I. Mustafa, Studies of γ-Ray Induced Polymerization of Aqueous Acrylamide, ***Polymer Plastic Technology & Engineering***, 42 (2), 285-296, (2003). **IF=1.481**.

13. **M. F. Mina**, M. E. Haque, F. J. Baltá Calleja, T. Asano and M. M. Alam, Microhardness Studies of the Interphase Boundary in Rubber-Softened Glassy Polymer Blends Prepared with/without Compatibilizer, ***Journal of Macromolecular Science- Physics***, B43(5), 1005-1015, (2004). **IF=0.619**.

14. **M. F. Mina**, F. Ania, T. A. Huy, G. H. Michlerand F. J. Baltá Calleja, Micromechanical Behavior and Glass Transition Temperature of Poly (methyl methacrylate)/Rubber Blend, ***Journal of Macromolecular Science - Physics***, B43(5), 947-961, (2004). **IF=0.619**.

15. M. A. Chowdhury, M. M. Alam, **M. F. Mina**, F.Akthar and S. E. Kabir, Optimization of Synthesis and Characterization of Acrylamide Hydrogel by γ-ray Irradiation, ***Chinese Journal of Polymer Science***, 22(3), 253-258, (2004). **IF=1.420**.

16. **M. F. Mina**, T. Asano, B. Poirier, D. Mondieig, A. Wuerflinger and C. Josefiak, Thermal and X-ray Measurements on n-Hexatriacontane, ***Journal de Physique IV, France (Journal of Physics IV, France)***, 113, 35-38, (2004). **IF=0.311**.

17. **M. F. Mina**, F. Ania, F.J. Baltá Calleja and T. Asano, Microhardness Studies of PMMA/Natural Rubber Blends, ***Journal of Applied Polymer Science***, 91, 205-210, (2004). **IF=1.64**.

18. **M. F. Mina**, A. K. M. M. Alam, M. N. K. Chowdhury, S. K. Bhattacharia, and F. J. Baltá Calleja Morphology, Mechanical and Thermal Properties of Un-deformed and Mechanically Deformed Poly (Methyl Methacrylate)/Rubber Blend, ***Polymer Plastic Technology & Engineering***, 44, 523-537, (2005). **IF=1.481**.

19. **M. F. Mina** and M. M. Alam, Swelling Behaviorof Acrylamide Hydrogel in Different Solvents and pHs, ***Chinese Journal of Polymer Science***, 23(3), 269-274 (2005). **IF=1.420**.

20. F. Ania, G.Broza, **M. F. Mina**, K. Schulte, Z.Roslaniec, F. J. Baltá-Calleja, Micromechanical Properties of Poly(butylenes terephthalate) Nanocomposites with Single- and Multi-walled Carbon Nanotubes, ***Composite Interfaces***, 13 (1), 33-45, (2006). **IF=0.701**.

21. M. N. K. Chowdhury, **M. F. Mina**, A. K. M. M. Alam, F. Akhtar, Synthesis of Polyelectrolyte and Studies of its Conductivity Changes with Respect to Molecular Weight, ***Polymer Plastic Technology & Engineering***, 13 (1), 33-45, (2006). **IF=1.481**.

22. **M. F. Mina**, M. N. K. Chowdhury, A. K. M. M. Alam, S. Bhattachariaya and G. H. Michler, Studies of Micromechanical Deformation Processes In Particle-Filled Glassy Polymer, ***Polymer Plastic Technology & Engineering***, 45, 1-7, (2006). **IF=1.481**.

23. T. Uchiyama, M. Suyama, M. M. Alam, T. Asano, S. Henning, A. Flores, F. J. Baltá-Calleja and **M. F. Mina**, Layer Structure Formation in Oriented Poly (ethylene terephthalate) Relating to Micromechanical Properties, ***Polymer***, 48, 542-555, (2007). **IF=3.766**.

24. **M. F. Mina**, S. Seema, R. Matin, M. J. Rahman,R. B. Sarker, M. A. Gafur and M. A. H. Bhuiyan, Improved performance of isotactic polypropylene/titanium dioxide composites: Effect of processing conditions and filler, ***Polymer Degradation and Stability***, 94,183-188, (2009). **IF=2.63**.

25. T. Asano, T. Furusho, M. M. Alam, Y. Tamba, C. S. and **M. F. Mina**, Laser Light and X-Ray Diffraction Studies of the Oriented Isotactic Polypropylene Prepared by the Temperature Slope Crystallization, ***Journal of Macromolecular Science-Physics***, 48, 774-788, (2009). **IF=0.619**.

26. **M. F. Mina**, Nasima Banu, Abdur Razzak, Md.Jellur Rahman, Md. Abdul Gafur and Md. Abu Hashan Bhuiyan, Structures and performance of white-clay filled isotactic-polypropylene composites prepared by double-molding techniques, ***Polymer Plastic Technology and Engineering***, 41, 1275-1281, (2009). **IF=1.481**.

27. **M. F. Mina**, M. A. Haque, M. K. H. Bhuiyan, M.A. Gafur, Y. Tamba, and T. Asano, Structural, Mechanical and Thermal Studies of Double-molded Isotactic Polypropylene Nanocomposites with Multi-Walled Carbon Nanotubes, ***Journal of Applied Polymer Science***, 118, 312-319,(2010). **IF=1.64**.

28. M. A. Gafur, R. Nasrin, **M. F. Mina**, A. H.Bhuiyan, Y. Tamba, and T. Asano, Structures and properties of the compression-molded isotactic-polypropylene/talc composites: Effect of cooling and rolling, ***Polymer Degradation and Stability***, 95, 1818-1825, (2010). **IF=2.63**.

29. A. H. Bhuiyan, **M. F. Mina**, S. Seema, M. M.Khan, M. J. Rahman, M. A. Gafur, Structural, elastic and thermal properties of titanium dioxide filled isotactic polypropylene, ***Journal of Polymer Research,*** 18, 1073-1079, (2011). **IF=1.897**.

30. M. E. Cagiao, F. J. Balta Calleja, F. Spieckermann, S. Scholtyssek, ,**M. F. Mina**, M. A. H. Bhuiyan, X-ray diffraction study of iPP/clay and iPP/TiO2 composites relating to micromechanical properties, ***Journal of Applied Polymer Science***, 124, 3147-3153, (2012). **IF=1.64**.

31. **M. F. Mina**, M. A. Haque, M. A. Gafur and T. Asano, Effect of Rolling Deformation on the Structures and Properties of Multi-Walled Carbon Nanotubes Filled Isotactic Polypropylene, ***Polymer International***, 61, 545-553, (2012). **IF=2.247**.

32. M. A. Haque, **M. F. Mina**, A.K.M. M. Alam, M. J.Rahman, M. A. H. Bhuiyan, and T. Asano, Multi-Walled Carbon Nanotubes Reinforced Isotactic Polypropylene Nanocomposites: Enhancement of Crystallization and Mechanical, Thermal and Electrical Properties, ***Polymer Composites***, 33, 1094-1104, (2012). **IF=1.455**.

33. M. N. K. Chowdhury, M.W. Khan,**M. F. Mina**, M.D. H. Beg, Maksudur R. Khan and A. K. M. M. Alam, Synthesis and characterization of radiation grafted films for removal of arsenic and some heavy metals from contaminated water, ***Radiation Physics and Chemistry***, 81,1606-1611, (2012). **IF=1.189**.

34. A. K. M. Moshiul Alam, M. D. H. Beg, D. M. Reddy Prasad, M. R. Khan and **M. F. Mina**, Structures and Performances of Simultaneous Ultrasound and Alkali Treated Oil Palm Empty Fruit Bunch Fiber Reinforced Poly(Lactic Acid) Composites, ***Composites Part A: Applied Science and Manufacturing***, 43, 1921-19294, (2012). **IF=3.012**.

35. M. R. Islam, M. D. H. Beg, A. Gupta and **M. F. Mina**, Optimal Performances of Ultrasound Treated Kenaf Fibre Reinforced Recycled Polypropylene Composites as Demonstrated by Response Surface Method, ***Journal of Applied Polymer Science***, 128(5), 2847-2856 (2013). **IF=1.64**.

36. **M. F. Mina**, M.D.H. Beg, M. R. Islam, A. Nizam, A. K. M. M. Alam and R M. Yunus, Structures and Properties of Injection Molded Biodegradable Poly(Lactic Acid) Nanocomposites Prepared with Untreated and Treated Multi-Walled Carbon Nanotubes. ***Polymer Engineering & Science***, 54(2), 317-326 (2014). **IF=1.441**

37. **M. F. Mina**, H. S. Shorowardy, Mubarak A Khan,A. K. M. M. Alam, M.D.H. Beg, Improved mechanical Performances of Triple Super Phosphate Treated Jute-Fabric Reinforced Polypropylene Composites Irradiated by Gamma Rays. ***Journal of Applied Polymer Science***, 130(1), 470-478 (2013). **IF=1.64**.

38. M. N. K. Chowdhury, M. D. H. Beg, Maksudur R. Khan and **M. F. Mina**, Synthesis of copper nanoparticles and their antimicrobial performances in natural fibres. ***Materials Letters***, 98, 26-29 (2013). **IF=2.269**.

39. M. N. K. Chowdhury, M. D. H. Beg, Maksudur R. Khan and **M. F. Mina**, Modification of oil palm empty fruit bunch fibers by nanoparticle impregnation and alkali treatment. ***Cellulose***, 20, 1477-1490 (2013). **IF=3.033**.

40. M. D. H. Beg, S. Samahani, **M. F. Mina** and R.M. Yunus, Simultaneous effects of coupling agent and flame retardant on empty fruit bunch fiber/polypropylene composites. ***Journal of Reinforced Plastics & Composites***, 32(17)**,** 1268-1284 (2013). **IF=1.188**.

41. M. K. Hassan Bhuiyan, M. M. Rahman, M. F. Mina, M. R. Islam, M. A. Gafur, A. Begum, Crystalline Morphology and Properties of Multi-Walled Carbon Nanotube Filled Isotactic Polypropylene: Influence of Filler Size and Loading, ***Composites Part A: Applied Science and Manufacturing***, 52, 70-79 (2013). **IF=3.012**.

42. M. N. K. Chowdhury, M. D. H. Beg, Maksudur R. Khan and **M. F. Mina**, Copper nanoparticles for improving the mechanical performances of oil palm empty fruit bunch fibers as analyzed by Weibull Model. ***Polymer Bulletin***, 70, 3103-3113 (2013). **IF=1.491.**

43. M. R. Islam, M.D.H. Beg and M. F. Mina. Fibre Surface Modifications through Different Treatments with the help of Design Expert Software for Natural Fibre Based Biocomposites. ***Journal of Composite Materials***. 48(15), 1887-1899, (2014). **IF: 1.257**.

44. M. K. Alam, M. T. Islam, **M. F. Mina**, M. A. Gafur, Structural, Mechanical, Thermal and Electrical Properties of Carbon Black Reinforced Polyester Resin Composites. ***Journal of Applied Polymer Science***, 131(13), 40421(1-11), (2014). **IF=1.64**.

45. M. H. S. Shohrawardy, M. K. Alam, **M. F. Mina** and Mubarak A Khan Fabrication of Strong and Thermally More Stable Jute-Fabric/Polypropylene Composites by Compression Molding along with γ-Ray Irradiation, ***Polymer Bulletin***, 71(5), 1219-1239, (2014). **IF=1.491.**

46. A. K. M. M. Alam, **M. F. Mina**, M. D. H. Beg, A. A. Mamun, A.K. Bledzki and Q. T. H. Shubhra, Thermo-Mechanical and Morphological Properties of Short Natural Fiber Reinforced Poly (Lactic Acid) Biocomposite: Effect of Fiber Treatment. ***Fibers and Polymers***, 15(6), 1303-1309, (2014). **IF=1.113.**

47. A. K. M. M. Alam, M. D. H. Beg, M. F. Mina, A. A. Mamun, and A.K. Bledzki, Degradation and Stability of Oil Palm Empty Fruit Bunch Fiber Reinforced Poly (Lactic Acid) Biocomposite: Effect of Fiber Length. Journal of Composite Materials, 49(25), 3103-3114, (2015). **IF=1.257.**

48. M. N. K. Chowdhury, M. D. H. Beg, Maksudur R. Khan and M. F. Mina, and A. F. Ismail, Copper nanoparticle in cationized palm oil fiber: physico-chemical investigation. Colloid and Polymer Science, 293 (3), 777-786, (2015). **IF=2.410.**

49. M. D. H. Beg, A. K. M. Moshiul Alam, R. M. Yunus, M. F. Mina, Improvement of interaction between pre-dispersed multi walled carbon nanotubes and unsaturated polyester resin. Journal of Nanoparticle Research, 17, 53 (1-13), (2015). **IF=2.278.**

50. M. R. Islam, A. Gupta, M. Rivai, M. D. H. Beg and M. F. Mina, Effects of fibre surface treatment on the properties of hybrid composites prepared from oil palm empty fruit bunch fibres, glass fibres and recycled polypropylene, Journal of Applied Polymer Science, 133(3), 43049(1-10), (2016). **IF=1.64.**

51. A. K. M. Moshiul Alam, M. D. H. Beg, R. M. Yunus, M. F. Mina, K.H. Maria and T. Mieno, Evolution of functionalized multi-walled carbon nanotubes by dendritic polymer coating and their anti-scavenging behavior during curing process, Materials Letters, 167, 58-60, (2016). **IF=2.489.**

Articles: (Refereed Journals without Impact Factor)

52. T. Asano, R. Nuryadi, Y. Shibata, **M. F. Mina**, Investigation of the Molecular Orientation of Polyethylene in the Supercooled Melt State by X-ray Diffraction, ***J. Fac. Sci. Shizuoka Univ.***, Japan, 32, 45-51 (1998).

53. .**M. F. Mina**, T. Asano and C. Sawatari, Physical and Thermal Properties of Even n-Alkanes, ***J. Fac. Sci. Shizuoka Univ*.,** Japan, 32, 53-63 (1998).

54. T. Asano, A. Saeki and **M. F. Mina**, Crystallization of Poly (ethylene terephthalate) Observed by X-Ray and Light Scattering Measurements, ***J. Fac. Sci. Shizuoka Univ.***, Japan, 33,23-32 (1999).

55. T. Asano, Y. Shibata, **M. F. Mina** and R. Nuryadi, Observation of the Crystallizing Front by Optical Microscope-TV System, ***J. Fac. Sci. Shizuoka Univ.***, Japan, 33, 33-40 (1999).

56. A. Wuerflinger, **M. F. Mina**, T. Asano and K.Higashi, Studies of Phase Transitions of Alkanes by Means of Thermal Measurements and X-ray Analysis, ***J. Fac. Sci. Shizuoka Univ***., 37,27-40, (2003).

57. M. M. Alam, F. Akthar, **M. F. Mina**, H. Rashid and A. I. Mustafa, Characterization of Acrylamide Hydrogel Prepared by γ-Ray Irradiation, ***Nuclear Science and Application***, 12(1&2), 41-45, (2003).

58. **M. F. Mina** and S. Akhbar, Versatile Applications of Microindentation Tests in the Characterization of Polymers and Their Blends, ***Bangladesh Journal of Physics***, 1(1), 84-94, (2004).

59. **M. F. Mina**, T. Asano and F. Akhtar, Studies on Cold-Drawn Crystallization and Mechanical Properties of Natural Rubber Produced in Bangladesh, ***Nuclear Science and Application***, 15, No.2, 46-50, (2006).

60. **M. F. Mina** and T. Asano, Fourier Analysis of Lamellar Structure of n-$C_{36}H_{74}$Crystal Studied by X-Ray Diffraction and Thermal Measurements, ***Bangladesh Journal of Physics***, 4, 75-84, (2007).

61. T. Datta, M. I. Ali, **F. Mina**, I. Kamal, D. K. Saha and A. H. Khan, Study of Crystal Structure, Dielectric Properties and Particle Size of $Ba_{0.6}Pb_{0.4}$TiO3 Ceramic Oxide Prepared by Polymer Matrix Precursor Rout, ***Bangladesh Journal of Physics***, 4,27-36, (2007).

62. **M. F. Mina,**and F. J. Balta Calleja, Correlation of Microhardness to Yield Stress and Microstructures Developed in Core-Shell-Particles-Toughened Poly (Methyl Methacrylate), ***Bangladesh Journal of Physics***, 3, 113-124, (2007).

63. **M. F. Mina**, G. H. Michler and F. J. Baltá Calleja, Glass Transition Temperature and Microhardness of Compatible and Incompatible Elastomer/Plastomer Blends, ***Journal of Bangladesh Academy of Sciences***, 33, No.1, 15-24, (2009).

64. T. A. Mobaraka, **M. F. Mina** and M. A. Gafur, Material Properties of Acetylated Jute-Mat Composites, ***Journal of Scientific Research***, 591, 13-23, (2013).

65. N. Parvin, M. S. Ullah, **M. F. Mina** and M. A. Gafur, Structures and mechanical properties of talc and carbon black reinforced high density polyethylene composites: Effects of organic and inorganic fillers, ***Journal of Bangladesh Academy of Sciences***, 17(1), 11-20, (2013).

66. T. A. Mobaraka, **M. F. Mina** and M. A. Gafur, Physico-mechanical, Thermal and Activation Energy Studies of Jute-Mat/ Poly(vinyl chloride) sandwich composites, *Journal of Bangladesh Academy of Sciences*, 39(1), 13-23, (2015)

Proceeding's Papers:

67. T. Asano, S. Yoshida, A. Nishida, and **M. F. Mina**, Space Resolved X-ray Diffraction Measurements of the Supercooled State of Polymers, ***Proceedings of the Photon Factory Meeting***, KEK, Tsukuba, Japan, p.30-33, December 19-20, (2000).

68. M. A. Khan, **M. F. Mina** and L. T. Drzal, Influence of Silane Coupling Agents of Different Functionalities on the Performance of Jute-Polycarbonate Composite, ***Proceedings of the 3rd International Wood and Natural Fibre Composites Symposium***, Kassel, Germany, page 5-1 to 5-25, Sep. 19-20, (2000).

69. C. Fonseca, A. Ochoa, C. González, P. Cardin, **M. F. Mina** and F. Ania, Determinación del estado de orientación en compuestos de PE con fibras de celulosa mediante medidas de microdureza, ***Materiales Compuestos***, 05, 171-178 (2005).

70. C M. A. Haque, M. K. H. Bhuiyan**, M. F. Mina**, M. A. Gafur, Y. tamba and T Asano, Structure and properties of injection-molded isotactic polypropylene and multi-walled carbon nanotubes composites, ***International Conference on Magnetism and Advanced Materials (ICMAM-2010),*** Dhaka, Bangladesh, 03-07 March, pp 227-230 (2010).

71. **M. F. Mina**, A. K. M. M. Alam, M. D. H. Beg and R. M. Yunus, Effect of Alkali and Simultaneous Ultrasound-Alkali treatments on the Performances of Oil Pump Empty Fruit Bunch Fibers, ***ICBBVAP-2012***, 23-24 October, pp.-- (2012), Kuala Lumpur, Malaysia.

72. M. N. K. Chowdhury, M. D. H. Beg and M. M. R. Khan, **M. F. Mina**, Synthesis, characterization and antimicrobial performances of copper nanoparticles, ***The 2nd International Conference on Engineering and Applied Science*** (2013 ICEAS), 15-17 March, (2013),Tokyo, Japan.

Patents:

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