CURRICULUM VITAE

FAIZ AHMAD, PhD(Advanced Materials)

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SPECIALIZATION/RESEARCH INTEREST

Intumescent Fire retarding coating, powder injection molding, Designing and development of Nano materials for thermal management of electronic devices, simulation of Nano polymers composites, bio-composites, corrosion of orthopedic stainless steel, machining of composite materials, processing and micro-structural characterization of materials

PERSONAL PROFILE

Date of Birth : 20th April 1960
Marital Status : Married with three children
Nationality : Canadian Permanent Resident

ACADEMIC QUALIFICATIONS

Ph.D, (Advanced Materials)
A New Route of Fiber Management in Metal Matrix Composites) (1986 - 1990)
Brunel, The University of West London, United Kingdom.

BSc Engineering (Metallurgy & Material Science) (1978 – 1983)
Institute of Chemical Engineering & Technology
The University of Punjab, Lahore Pakistan.
Research Project: **Die Casting of Al-Si alloy (LM-13) of piston of car**

EMPLOYMENT HISTORY

Associate Professor (2003 – May,2014)

Responsibilities: Teaching and Supervisor of Post Graduate research.

University of Technology PETRONAS, Malaysia.

Associate Professor (2000 – 2003)

Teaching undergraduate /post graduate and supervision of Postgraduate research

(2000- 2003)

Department of Aerospace Engineering

National University of Sciences and Technology, Pakistan.

Principal Research Officer (1990 – 2000)

Project manager and Led team of 10 Scientists

Government of Pakistan.

Research Fellow (PhD) (1986 – 1990)

Brunel, The University of West London, United Kingdom

Research officer (March 1986 – September 1986)

Government of Pakistan.

Assistant Manager (1984 – 1986)

Foundry and Forging

Pakistan.

Trainee Engineer (July 1984 – October 1984)

Foundry and Casting, Pakistan.

SUBJECT DELIVERED

University of Technology PETRONAS (2003 – Present)

Failure Analaysis

Corrosion Engineering

Advanced Engineering Materials

Composites processing techniques (MMCs,PMCs,CMCs) and mechanics,

Polymer Technology,

Mechanical metallurgy,

Introduction to materials science

Engineering materials.

Powder Metallurgy

Manufacturing Technology II

Engineering mechanics

National University of Science & Technology (2000 – 2003)

- Materials Science
- Composite Materials - MS classes
- Engineering Dynamics
- Engineering drawing

LEADERSHIP IN MATERIAL RESEARCH

- ***Team Leader***
- Lightweight vehicle, Centre for Automotive Research
- ***Team Leader***
- Advanced Materials Research**,** Nano Technology.

INTERNATIONAL AWARDS AND RECOGNITION

1. Award for Most innovative Product for year-2013, University Technology PETRONAS
2. Gold Medal ,Hybrid Fiber Composite for grating system ,British invention show-2013
3. Gold Medal, Nanocomposite Heat sink, British invention show-2013
4. Gold Medal, Superconductor Nanocomposite Heat Dissipater, ITEX 2013
5. Gold Medal, A new Hybrid Fiber composite for Drain Grating cover, ITEX 2013

6. Silver Medal, Fiber Reinforced intumescent coatings for fire safety of structures, ITEX 2013
7. Gold Medal, Hybrid Fiber composite grating system.
8. **Platinum, and Gold Medal,** Green Intumescent Fire Retardant Coating for Fire Protection. British Invention Show, Oct.2012
9. **Double Gold Medal, and gold medal** 316L SS for Medical Application, British Invention Show, Oct.2012
10. **Silver Medal, Nano Composites Heat Sink,** British Invention Show, Oct.2012
11. **Gold Medal,** from ITEX-2012 and Special Russian Severstal Steel awardon Metal Injection Molded Heat Sink, Nano Composite.
12. **Siver Medal,** Mineral Based Intumescent Fire Retardant Coating, ITEX-2012.
13. **Bronze Medal,** Metal Injection Molded Materials for Bio and Dental implants.
14. **Silver Medal,** from Malaysian Technical Expo-MTE-2012, for Mineral Based Intumescent Fire Retardant Paint- for construction industry
15. Bronze Medal, from Malaysian Technical Expo-MTE-2012, for Nano Heat Sink for Electronic Devices.
16. **Gold Medal** and Certificate of Merit-**INPAX-2011, USA**, **New Bio-implants (Material Produced by MIM)**
17. **Gold Medal- INPAX-2011**, USA, Intumescent Coating-Category "Construction"
18. **GOLD Medal "Efficient Intumescent Coating,** Malaysian Technology Exhibition, held on 17-19 Feb.2011.
19. Gold Medal, SEDX, 2011, Intumescent coating.
20. Gold Medal, SEDX, 2011 , Bio implant materials.
21. Silver Medal, SEDX-2011, held in University Technology PETRONAS, Nano Heat Sink
22. Won, "BRONZE Medal" For Orthopedic Materials**,** Malaysian Technology Exhibition, held on 17-19 Feb.2011
23. **SILVER Medal** " for inventing " Intumescent Fire Retarding Coatings, **IENA, Germany** held on 28-31 Oct.2010
24. **3 Silver** and **one Bronze** in Engineering Design Exhibition held on 25 Oct.2010 on various innovations.

25. 4 **Gold Medals** and most innovative Research award on “Intumescent Fire Retarding coating for oil and gas industry- in Engineering Design Exhibition
26. EDX -25, 21-22 April,2010.
27. **Gold Medal** on Powder Injection Molded materials for Bio-implant in Engineering Design Exhibition-EDX 25, 21-22 April,2010.
28. **GoldMedal** on novel Materials for pup joint used in Oil and gas industry-Engineering Design Exhibition-EDX 25, 21-22 April, 2010.
29. Performance appreciation Bonus for 2008-09.
30. **Silver medal** for developing intumescent coating, in Engineering Design Exhibition-EDX-22, Oct.2008.
31. Appreciation, Certificate for Training lecturers for technical writing skill, Nov-2008
32. Appreciation, award for organizing International conference,ICPER-2008
33. Member, International Liaison Committee, Metal Powder Ind. Federation, APMI, for Int. Congress on PM and Particulate Materials, Washington, DC, June 2008.
34. University Technology PETRONAS, Malaysia has given award for publishing maximum number of international journal/conference papers in 2006 for past 10 years. 2007.
35. Int. J.of Powder Metallurgy, USA published as leading researcher in PIM Composites , Dec., 2007.
36. Examiner at Ph.D and MS level at Malaysia and international
37. Published in “**Who is who”** in the World in year 2006.
38. Coordinator, Regional Materials Research Society, Dubai, 2006
39. Fellowship for Ph.D research in UK. 1986-90.

RESEARCH GRANTS & PRINCIPAL INVESTIGATOR

1. Production and roll out of nano composite for thermal management (Jan 2014-Dec2016)
2. Pre-commercialization of Metal Injection Molded 316L stainless steel dental Implant- RM2.99M (Project Director/ Principal Investigator) Dec 2013 – Dec 2016.

3. Synthesis and characterization of nano inorganic fillers based intumescent fire retardant coating- RM 107 K (Principal Investigator) Dec 2013 to Dec2015
4. Industrial research grant –RM102K for large scale tests.
5. International research grant- Higher Education Commission of Pakistan, PKR 0.5 M- Corrosion of Sintered 316 L Stainless steel. Nov.2013- Aug.2014
6. Prototype Research Grant Scheme- RM87K (Mineral based Intumescent Fire Retardant Coating) July-2012. Principal Investigator
7. Exploratory Research Grant Scheme- RM85K, (Green Intumescent Fire Retarding Coating) June,2012-Principal Investigator
8. URIF-50K June-2012 De.2013 (Nano wire magnetic storage media).Principal Investigator
9. URIF-RM50K, Nov.2011–Oct.2013, Nano Heat Sink-Principal Investigator
10. URIF-RM49K, Aug-2011-July,2013, Drilling defects free holes in hybrid Fiber Composites,(Principal inverstigator,PI)
11. RM 78K, Jan-2011-Dec.2013 " New Intumescent Fire Retarding Material For Structural Steel Application" FRGS-MOSTI-Govt. of Malaysia On-going (Principal Investigator, PI)
12. RM21.03 Millions Apir.08- 2010 development of " Next Generation of Intumescent Coatings" - Completed (PI)
13. RM800K Dec.2005-June 2007 "Development of Light Rail Transit, Brake pad materials. (Completed)- Member- Completed and commercialized
14. RM 40 K, Jun 09 – May 11 "Development of powder injection molded CNT reinforced copper heat sink- (PI)-completed.
15. RM6.0K (Jan-08) Technical Services to MMU, UM, and OPUs.

MATERIAL DEVELOPMENTS AND COMMERCIALIZED

- Brake Pad Materials for LRT Commuter in KL, Malaysia-

  Developed and commercialized.

- Intumescent Fire Retardant Coating for Steel and Plastic Composites

  Developed- Commercialization in progress with International companies.

- Inorganic Fillers Based Intumescent Fire Retardant Coating for Steel Structures *Developed- commercialization in progress*

- Powder Injection Molded 316 L Stainless steel with controlled carbides *Developed- commercialization in progress*

- Powder Injection Molded Nano Composites for Heat Sink application- ***Developed and commercialized on 24 March,2014***

POSTGRADUATE RESEARCH SUPERVISION

1. MS Research Projects completed/on-going

- Effects of fiber orientation on Thermal conductivity of PIM carbon fiber reinforced copper composites.-***2014***
- Nano ceramic fillers based intumescent fire retardant coatings-2014
- Wollestonite filler based intumescent fire retardant coating for structural application. **2014**
- Effect of BC on Bonding mechanism of EG based Intumescent Fire Retarding Coating for structural steel.-***graduated-2012***
- Stir Friction welding of Stainless steel.- ***2013***
- Effects of Talc on Performance of Intumescent fire retarding coating- ***Graduated ,2011***
- A Study of Bonding of Intumescent Fire Retarding Coating with Steel Substrate, ***Graduated 2010.***
- A Study of Drilling Parameters in Laminated Composites and Hybrid Fiber Composites ***–Graduated 2010.***
- An Investigation of Electro-discharge Machining of Alumina Particles Reinforced Aluminum Matrix Composites- ***Graduated 2010.***
- Designing and stress Analysis of a Structural Beam for Aero Space application – ***Graduated 2002.***
- Application of ANSYS for Structural Stress Analysis –***Graduated 2002.***
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2. PhD Research Projects Completed/on-going

- Metal Injection Molding of CNTs Reinforced Copper Matrix Composites for Thermal management -2014
- Drilling in fiber and hybrid fiber composites- ***2014***
- Synthesis and characterization of efficient Intumescent Coating for Structural Steel***—graduated 2012***
- Development of 316L Stainless Steel for Medical Application – ***Graduated 2012***
- Char Strengthening Mechanism of Intumescent Fire Retarding Coating- ***Graduated 2013***
- Study on Developing Zirconium based ceramics for high temperature application—***Graduated 2013***
- Simulation and development of CNTs reinforced polymer composites.- ***Graduated -2013***
- Heat effects on drilled holes in fiber reinforced composites- ***in progress.***
- Pipe line repair using Composite wrap-up – ***Submission***
- PIM of Copper/ Carbon fiber composites***- In progress***
- Electro-magnet-Nano wires- ***in progress***

3. Under-Graduate Projects

- Completion of 100 research projects.
- Completion of projects on bio-materials specially using bio-waste and few other projects are on-going.

4. Post-Graduate supervision

- Direct Supervision = 9 PhD students and 4 MS research students.
- Co-supervision = 3 PhD students

5. Peer Reviewer

Peer Reviewer for **15** international journals

PROFESSIONAL MEMBERSHIPS

1. ***Professional Memberships***

Member American Powder Metallurgy Institute, USA, since 1988

- Professional Engineer, Pakistan Engineering Council, since 1989
- **P.Eng, Ontario, Canada,2008** (Academic, PPE passed)
- Fellow, Pakistan Institute of Metallurgical and Materials Engineers, Pakistan
- Life member- Malaysian Tribology Society, Malaysia
- Fellow, Malaysian Powder Metallurgy Society, Malaysia

SERVICES-ADMINISTRTIVE

- Head of Nano Materials group
- Development of LRT Brake Pad funded by IRPA-Joint Research project with various Universities and SIRIM Sdn. Bhd.(Completed and commercialized)
- Team Leader –Light weight vehicle-Centre for automotive Research
- Paper Evaluation Committee (Locomotive Brake Pad materials)
- Examiner for Post-graduate research (local and international)
- Social services

LOCAL & INTERNATIONAL COLLABORATIONS

- *Department of Aerospace, UTM, Johor Baru, Malaysia on " Machining of Composite Materials"*
- *San Diego State University , USA (Powder Injection Molding) – Prof. R.M German*
- *Natural Resources Canada, Ottawa Labs. (Tribology of MMCs, EDM of metal matrix composites).*
- *Collaboration with University Malaysa-Malaysia for Fire Retardant and Biological research on bio implant*
- *Collaboration with Advanced Materials Research, Kulim, Kedah, Malaysia*

- *Nano Malaysia Sdn Bhd. Kuala Lumpur, Malayssia*
- *Fire Science Research Organization, Belgium based company*
- *Dulux Paint Australia*
- *COMSATS, Pakistan*
- *Uni.Tech.Petronas-PRSS for nano-composites*
- *University Sains Malaysia (Bio-materials)*
- *Member , Polymer Advisory council on Petro-Chemical Business, 2009*
- *Led, Delegations to Pakistan, for Selection of Post graduate Researcher,June-2008, Jan 2011 and Aug.2011.*
- *Head of research team on" Next Generation of Intumescent Coatings"*
  2007-2010
- *Member Innovation Committee,*
- *Co-Chairman for International Conference on Plant Design and Reliability-2008.*
- *Subject expert, for Faculty Selection Board, Punjab University Lahore, Pakistan, 2001-2003*
- *Research Monitor, Ministry of Science and Technology, Govt. of Pakistan, 2002-2003*
- *Facilitator for mentoring the publication on research*
- *Member, committees for copper and aluminium extraction.*
- *Chair, departmental selection committee for employment*
- *Prepared, data of materials imported for industries, Pakistan. 1993-1994.*

NATIONAL AND INTERNATIONAL CONFERENCES/EXHIBITIONS

1. British Innovation Show-2012, Silver Medal for , Nano Heat sink
2. British Innovation Show-2012, Double Gold, for dental implants
3. British Innovation Show-2012, Platinum Award of year, Double Gold,

4. MTE-2012, PWTC, KL, Malaysia
5. INPAX-2011, Pitts burgh, June-2011, USA
6. ICMAT-2011, SUNTEC, Singapore.
7. Malaysian Technical Exibition-2011 Feb.2011 KL, Malaysia
8. IENA, Oct.2010 Germany
9. Seminar of Deep water Technology: Advance and Future, June 6-9, 2011, Impiana, KLCC,
10. Malaysian Powder Metallurgy Society, Penang, 22-23 Nov.2010 Malaysia
11. World Engineering Congress, Kuching, Malaysia, Aug.2010
12. Short Course on "**Nanostructured Materials**, manufacturing, characterizing and applications" organized by IRONX-Continuing Education, Hotel .The Ritz Carlton, Kuala Lumpur, Sep.23-25, 2009.
13. Visited CANMET, Federal Government labs., OTTAWA, Canada in June,2008
14. International Congress on Powder Metallurgy and Particulate Materials Washington, DC,USA, 8-12 June,2008
15. ICPER-2008, Sunway Resort Hotel, Kuala Lumpur, Malaysia. 27-28 March,2008
16. Curtin University Engineering Conference, Sarawak,26-27 Nov. 2007
17. Workshop on Nano materials,14-17 Aug.2007, USM, Malaysia
18. International conference of Powder Metallurgy and Particulate Materials, May 13-16, 2007 Denver, Colorado, USA.
19. Fifth colloquium on Malaysian Friction brake Pad Materials, 6-8 June, 2007.
20. Forum for Nuclear Cooperation in Asia, Kula Lumpur, Dec.12,2006
21. Colloquium on Friction Materials, Langkawi,Nov.20-21,2006
22. International conference on P/M and Particulate materials, San Diego, USA, June 18-21,2006
23. International conference on Application of conventional and advanced materials in harsh environments, American University Sharjah, 20-21 Mar.2006
24. Two day workshop on Nano composites, arranged by CSIRO, Australia-PRSS-Malaysia, Dec.6-7, 2005

25. International conference on P/M and Particulate materials, Montreal, Canada June, 19-23, 2005

26. Asian-Australasian Conference on Composite Materials, (ACCM-4), Sydney, Australia, July, 4-6, 2004

27. Workshop on composite materials, Malacca, Malaysia, Mar.21-22, 2004

SELECTED PUBLICATIONS

1. Sami Ullah and Faiz Ahmad
"Effects of Zirconium silicate Reinforcement on Thermal Performance of Intumescent Fire retardant Coating". Polymer Degradation and Stability –available on-line, March 2014.

2. Sami Ullah, A.M. Shariff, Muhammad Nadeem, Faiz Ahmad, Shaukat Ali Shahid, M. Sagir, Muhammad Rafi Raza Malik, Muhammad Mushtaq
"The Synergistic Effect of Thiourea and Surfactants on Corrosion Inhibition of Stainless Steel-316 in Hydrochloric acid". Journal Advanced Material Research-2014

3. Sami Ullah, A.M.Shariff, Muhammad Nadeem, Faiz Ahmad, Shahukat Ali Shahid, Ghulam Murshid, M.Sagir and Muhammad Mushtaq. "Synergistic Effect of Thiourea and Surfactants on Corrosion Inhibition of Stainless Steel-410 in Presence of Sulfuric Acid". Presented for the 3rd International Conference and Exhibition on Sustainable Energy and Advanced Material (ICE-SEAM 2013) will be held on 30 - 31 October 2013 at Melaka International Trade Center, Malaysia.

4. Faiz Ahmad, Sami Ullah Wan Farhana bt Mohammad and M.Farth Shariff."Thermal Performance of Alumina Filler Reinforced Intumescent Fire Retardant Coating for Structural Application". Presented for the 13th International Symposium on Advanced Materials (ISAM-2013) 23 - 27 September 2013, Islamabad, Pakistan.

5. Sami Ullah, Faiz Ahmed and Anildav Singh. “Development and Testing of Intumescent Fire Retardant Coating on Various Structural Geometries”. Presented for the 3rd International Conference and Exhibition on Sustainable Energy and Advanced Material (ICE-SEAM 2013) will be held on 30 - 31 October 2013 at Melaka International Trade Center, Malaysia.

6. Faiz Ahmad, Sami Ullah, Wan Farhana Mohammad, H.Aziz and Zaiful Iqmal Zohari. “Non-Toxic Mineral Based Intumescent Fire Retardant Coating for Structural Applications”. International Journal of Institute of Materials Malaysia (IJIMM). March 2014.

7. Sami Ullah, Faiz Ahmed and P. S. M. Megat Yusoff. “Effect of Boric acid and Melamine on the Intumescent Fire retardant Coating composition for the fire protection of structural steel substrate”. Journal of Applied Polymer Science. Volume 128, Issue 5, pages 2983–2993, 5 June 2013.

8. W. Farhana Mohamad, Faiz Ahmad and Sami Ullah. “Effect of Inorganic Fillers on Thermal Performance and Char Morphology of Intumescent Fire Retardant Coating”. Asian Journal of Scientific Research, 6: 263-271, 2013.

9. Sami Ullah, Faiz Ahmed and P. S. M. Megat Yusoff “The effect on Expansion and Thermal degradation of 63µm Expandable graphite on Intumescent fire retardant coating composition”, Research Journal of Chemistry and Environment, Volume 15, no. (2) (2011) Pages 944-951.

10. Sami Ullah, Faiz Ahmed and P. S. M. MegatYusoff “Effect of boric acid with kaolin clay on thermal degradation of intumescent fire retardant coating”; Journal of Applied Sciences, 11(21)2011, 3645-3649.

11. Ali Samer Muhsan, Faiz Ahmad, Norani M. Mohamed, Putri S. M. Megat-Yusoff and M. Rafi Raza “Multiwalled Carbon Nanotubes Reinforced Copper Matrix Nanocomposites via Metal Injection Molding Technique”, Journal of Applied Science (JAS) (2012).

12. Norlaili Amir, Faiz Ahmad, Puteri Melor, “Mechanisms of Char Strengthening in the Fibre Reinforced Intumescent Coatings (FRIC) Determined Via Scanning Electron Microscopy”, Journal of Applied Sciences (2013)

13. W.Farhana Mohamad and Faiz Ahmad “Effect of Inorganic Fillers on Thermal Performance and Char Morphology of Intumescent Fire Retardant Coating”, Asian Journal of Scientific Research (2013).

14. N. Amer, Faiz Ahmad and P.S. M “Assessment of Inorganic Non-Metallic Fibre Reinforced Epoxy-Based Intumescent Coatings (FRIC) and A Commercial Intumescent Coating" Aug. 2012, J of Applied Polymer Science.

15. M. Rafi Raza, Faiz Ahmad, M.A. Omar, R. M. German and Ali S. Muhsan, “Defects Analysis of 316L SS during Powder Injection Molding Process” Defects and Diffusion, 2012, 329, pp35-43.

16. Ali Samer M, Faiz Ahmad and M. Rafi Raza “Flow Properties of Cu/CNTs Feedstocks for Powder Injection Molding” Accepted International of Applied Mathematics and Physics, Dec.2013.

17. M.RafiRaza, Faiz Ahmad, Othman Mamat, M.A.Omar,R.M.German and Ali S.Muhsan “Effects of Sintering Temperature and Cooling Rate on Mechanical Properties of Powder Injection Molded 316 L Stainless Steel”. Solid State Phenomena, vol.185,2012,102-105.

18. Sami Ullah, Faiz Ahmad,P.S.M.Megat Yusoff “Effect of Boric Acid and Melamine on the Intumescent Fire Retardant Coating Composition for

the Fire Protection of Structural Steel Substrate". Accepted Journal of Applied Polymer Science Nov.2011- available on line.

19. Jesbains K, Faiz Ahmad, P.S.M Megat Yusoff, Sami Ullah "The Study of Bonding Mechanism of Expandable Graphite based intumescent Coating",Research Journal of Chemistry and Environment; Vol 15, issue 2, June 2011, pp401-405.

20. Sami Ullah, Faiz Ahmad and P.S.M. Megat-Yusoff. "Effect of kaolin clay on thermal degradation of intumescent fire retardant coating". Published in the proceeding of the Program for *24th Symposium of* Malaysian Chemical Engineers/1st International Conference on Process Engineering and Advanced Materials (ICPEAM) June 2010.

21. Sami Ullah, Faiz Ahmed and P. S. M. Megat Yusoff "Enhancing the Char Resistant of Intumescent Fire Retardant Coating by using Carbon Nano Tubes"; Published in the Proceeding of International Conference on Materials for Advanced Technologies, held on 26 June to 1 July 2011.

22. Rafi Raza , Faiz Ahmad, M.A. Omar and R.M. German "Effects of Cooling Rate on Mechanical Properties and Corrosion Resistance of Vacuum Sintered Powder Injection Molded 316 L Stainless Steel", J. of Material Processing Technology,Vol.212, pp.164-170,2012.

23. N.Amir, Faiz Ahmad and P.S.M.Megat-Yusoff "Characterization of Inorganic Non-Metallic Fiber Reinforced Epoxy-Based Intumescent Coating and Chartex 7" Engineering e-Transaction (ISSN 1823-6379), Vol.6, No.2 Dec.2011 PP.143-151.

24. Faiz Ahmad, M. Rafi Raza "Quantitative analysis of fiber fracture in powder injection molded metal composites", Defects and Diffusion Forum, vol. 319-320 (2011) pp65-76.

25. Amir,N, F. Ahmad and P.S.M. Megat-Yusoff “Study on the Fibre Reinforced Epoxy-based Intumescent Coating Formulations and their Char Characteristics”, Journal of Applied Sciences, Received: October 26, 2010; April 18, 2011. 10 (11). pp. 1678-1687. ISSN 1812-5654.

26. M.F.Arif, Puteri S.M.Megat-Yusoff and Faiz Ahmad “Effects of Chemical Treatment on Oil Palm Empty Fruit Bunch Reinforced High Density Polyethylene Composites”. J. of Reinforced Plastic and Composites, Vol.29, No.14/2010, PP 2105-2118.

27. Sami Ullah and Faiz Ahmad “Enhancing the Char Strength of Expandable Graphite Based Intumescent Fire Retardant Coating by using Multi-Wall Carbon Nanotubes for Structural application” Solid Sate Phenomena,vol.185,2012,pp.90-93.

28. Mazli Mustapha, Othman Mamat, Patthi Hussain, Faiz Ahmad, Faizal Mustafa and Kartini Noorsal and Sallehuddin Mohammad Haris “Preliminary Study of the Fabrication of Aluminum Foam Through Pressure Assisted Sintering Dissolution Process”. J. of Materials Processing Technology 210 (2010),pp1598-1612.

29. Gehad Goudah, Faiz Ahmad and Othman Mamat “Micro structural studies of sintered carbon nano tubes reinforced copper matrix composites”. “Journal of Engineering Science and Technology (JESTEC) vol.5, No.3 (2010),pp.272-283.

30. Faiz Ahmad,S.H.Jason Lo, A. Majdi Ab.Rani and M. Rafi Raza ,”Wear Properties of Alumina Particles Reinforced Aluminium Alloy Matrix Composite” ,J.App Sci. 11(9)2011, 1673-1677.

31. Gehad GoudahM.Soluiman, Faiz Ahmad, Othman Mamat, A. Afian Omer “Preparation and characterization of copper feedstock for Metal Injection Molding” .Journal of Applied Sciences, 10 (24), pp 3295-3300.

32. Sami Ullah, Faiz Ahmad, P.S.M. Megat-Yusoff and HannatulHazwaniDzulkafli *"*Study of bonding mechanism of expandable graphite based intumescent coating". Journal of Applied Sciences, 11(9) 2011, 1630-1635.

33. Sami Ullah, Faiz Ahmadand P. S. M. Megat Yusoff. "The effect on Expansion and Thermal degradation of 300µm Expandable graphite on Intumescent fire retardant coating composition". Submitted to Journal of Applied Polymer science -2011.

34. Alexis M. Nanimina, Ahmad Majdi Ab. Rani and Faiz Ahmad " Effects of Electro-Discharge Machining on Alumina particles reinforced aluminium Composites" Journal of Applied Sciences- .2011,Available on-line ISSN 1812-5654.

35. AmirandFaiz Ahmad, P.S.MMegatYusoff. "Effects of Fibre Reinforcement on Epoxy-based Intumescent Coating Formulations" Journal of Applied Sciences-2011,2011 23702-JAS-ANSI.–*Available on-line ISSN 1812-5654*

36. M. Rafi Raza, Faiz Ahmad, N.Ikram, R. Ahmad and A. Salam "Development and Working and Heat treatment strengthening of 2219 Aluminum alloy by mechanical working",J. App Sci. 11(10)2011, 1857-1861.

37. M. Rafi Raza, Faiz Ahmad and M.A. Omar, "Binder Removal from Powder Injection Molded 316L Stainless Steel", J. of Applied Sciences, 11(11)2011, 2042-2047.

38. Sami Ullah, Faiz Ahmad and P. S.M Megat Yusoff " Effect of Kaolin Clay on Thermal Degradation of Intumescent Fire Retardant Coating",Journal of Applied Sciences- May, 2011).

39. N.Amir, Faiz Ahmad andP S Melor, N.Amir "Characterization of inorganic Non-Metallic Fiber reinforced epoxy based intumescent

coating(FRIC) and Chartex". Engineering e-Transaction, Vol6, No.2 pp.143-151,2011.

40. P.Megat Yusoff*, Faiz Ahmad, N.Amir and S.F.Leong "Effect of Particles dispersion on thermal conductivity of copper powder filled epoxy composites". American Institute of Physics June, 2010, Vol. pp.

41. Alexis MouangueNanimina, Ahmad Majdi Abdul Rani, Faiz Ahmad[1], S.H Jason Lo. "Non-Conventional Machining of Aluminum Matrix Composites". World Journal of Engineering", 6(4) (2009), 20-25.

42. Faiz Ahmad "Control of molding defects inPowder Injection Molded Metal Composites".Int. J. Powder Metallurgy, USA, Vol.44, Issue 3, pp.69-76, May/June, 2008).

43. Faiz Ahmad "Injection molded SiC-reinforced PM Aluminum Matrix Composites" International Journal of Powder Metallurgy, (USA) vol.42, No.3, May/June 2006, pp. 67-73

44. R.M. German and Faiz Ahmad "Statistical Analysis of Fiber Fracture during Powder Injection Molding" J. Powder Metallurgy, 2006, Vol 49 No.4 pp.307-313.

45. H.P.S. A. Khalil, S. B. Sharifah Shahnaz, M.M. Ratnam, Faiz Ahmad, and N.A. NikFuaad, "Recycle Polypropylene (RPP) - Wood Saw Dust (WSD) Composites-Part 1: The Effect of Different Filler Size and Filler Loading on Mechanical and Water Absorption Properties", Journal of Reinforced Plastics and Composites (2006) 25: 1291-1303.

46. Abdul Khalil H.P.S, S.B.S Shahnaz, M.M.Ratnam, A.M.Issam, F. Ahmad and N.A.N.Fuaad "Recycle Polypropylene (PP) – Wood Saw Dust (WSD) Composites: The Effect of Acetylation on Mechanical and Water Absorption Properties", Journal of the Korean Wood Science and Technology), Vol 34, 2, 1-12, (2006).

47. Faiz Ahmad “Rheology of Metal Composite mixes for Powder Injection Molding”. International Journal of Powder Metallurgy (USA) vol.41, No.4,43-48,Nov/Dec. 2005.

48. Faiz Ahmad “Orientation of Short Fibers in Powder Injection Molded Aluminum Metal Matrix Composites*”.* International J. Materials processing and Technology, Vol169, Issue no.2, pp. 263-269, Nov.2005.

49. E.I.Pinwill, Faiz Ahmad, M.J. Bevis, P.Allan “Application of shear control orientation technologyto powder injection molding” .Int. J. of Powder Metallurgy, USA, vol.35 No.2 pp.1-6, 1992,

50. Abid A. Khan, Faiz Ahmad, Iqbal Rasool and Xu Yuan Ming “Error computations for adoptive finite element analysis” .J.ofEngg.& Appl.Sci, vol.21,no.2,pp.53-60 July-Dec 2002,ISBN 1023-862.

51. Norlaili Amir, Faiz Ahmad, Puteri Melor “Char Strength of Wool Fibre Reinforced Epoxy-Based Intumescent Coatings (FRIC) “International Conference on Advanced Material Engineering & Technology 2012 (ICAMET 2012)Accepted for publication in the conference proceeding and AMR.

52. Norlaili Amir, Faiz Ahmad, Puteri Melor “Mechanisms of Char Strengthening in the Fibre Reinforced Intumescent Coatings (FRIC) Determined Via Scanning Electron Microscopy”, ICPER-2012June, 2012, KL, Malaysia.

53. Imran Irshad, Faiz Ahmad, N.M. Muhammad ‘”A Review on Nanowires as an Alternative High Density Magnetic Storage Media” 2nd International Conference on Fundamental and Applied Sciences-KL, Malaysia June-2012.

54. N.Amir, Faiz Ahmad and P.S.M Megat-Yusoff "Characterization of inorganic non-metallic fiber reinforced epoxy- based intumescent coatings and chartex exposed to high temperature". Presented, Regional Tribology Conference, held at Bayview Hotel Lanhkawi Island, Malaysia, 22-24 Nov.2011.

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