**DEPARTMENT OF MECHANICAL ENGINEERING**

**UNIVERSITY OF ENGINEERING AND TECHNOLOGYTAXILA**

**Minutes of Meeting of Board of Post-Graduate Studies, held on 24.08.2021 at 10:00am**

**In the conference room of Mechanical Engineering Department**

Following were present:

* 1. Prof. Dr. Muzaffar Ali (In Chair)
  2. Prof. Dr. Muhammad Zubair Khan (External Member)
  3. Prof. Dr. Athar Masood (External Member)
  4. Dr. Ajaz Bashir Janjua (External Member)
  5. Dr. Azhar Munir (External Member)
  6. Dr. Mubashir Gulzar (Invited Member)
  7. Prof. Dr. Muhammad Ali Nasir (Director PGS)
  8. Concerned Supervisors

The meeting started with the name of Allah Al-mighty.

**Item No. 1. Postgraduate Research Seminar (Final Progress Report)**

Following students presented their progress report of M.Sc. Research.

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Ghulam Murtaza, 18-MS-PT-AMD-16** |
| **Supervisor** | Prof. Dr. Nazeer Ahmad Anjum |
| **Thesis Title** | Investigation Through Experimentation the Stress Corrosion Cracking of Friction Stir Welded Aluminum Alloy |
| **Panel for External Viva** | 1. **Dr. Waqas Anwar,** General Manager, AWC Hassanabdal. 2. **Dr. Masood ur Rehman Shah,** CEO Innoviatech Islamabad. 3. **Prof. Dr. Saeed Badshah,** IIU Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed her to appear for her final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Atiya Sadiq, 16-MS-PT-TSE-05** |
| **Supervisor** | Prof. Dr. Muzaffar Ali |
| **Thesis Title** | Model Based Transient Analysis of a Solar Assisted Absorption System for Multi-Climate Zones with Dynamic Building Load. |
| **Panel for External Viva** | 1. **Dr. Saba Arif, Assistant Professor,** Air University Islamabad (Kamra Campus). 2. **Dr. Rubeena Kamal,** PhD Mechanical Engineering UET Taxila. 3. **Dr. Taqi Cheema,** Ghulam Ishaq Khan Institute, Topi, Distt. Swabi. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Muhammad Islam Nabi, 17-MS-PT-ENE-14** |
| **Supervisor** | Prof. Dr. Muzaffar Ali |
| **Thesis Title** | Techno-Economic Assessment of Interlocking Energy Efficient Bricks (IEEB) for Energy Efficient Buildings |
|  | 1. **Prof. Dr. Saeed Badshah,** Mechanical Engineering Department, IIU Islamabad. 2. **Dr. Ajaz Bashir Janjua,** General Manager, HMC Taxila. 3. **Prof. Dr. Nadeem Ahmed Sheikh,** Dean Faculty of Mechanical Engineering, IIU Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Muhammad Ali, 18-MS-ME-TSE-01** |
| **Supervisor** | Dr. Azhar Hussain |
| **Thesis Title** | Design and Structural Analysis of Non-Pneumatic Tyres for Different Structures of Polyurethene Spokes |
|  | 1. **Dr. Sohail Malik**, Assistant Professor, GIKI Topi, Distt. Swabi 2. **Prof. Dr. Muhammad Zubair Khan**, IST Islamabad. 3. **Dr. Muhammad Asif,** Assistant Professor, GIKI Topi, Distt. Swabi. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar and Registration** | **Ali Haider, 16-MS-PT-AMD-11** |
| **Supervisor** | Dr. Azhar Hussain |
| **Thesis Title** | Investigation of the Effects of Cr-Ti and Al Based Hard Coatings on Tribological Properties of Stainless Steel. |
| **Panel for External Viva** | 1. **Dr. Ramzan Abdul Karim,** Associate Professor, GIKI Topi, Distt. Swabi. 2. **Dr. Yasir,** Assistant Professor IST Islamabad. 3. **Dr. Ehsan ul Haq,** Assistant Professor, UET Lahore. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Muhammad Faizan Zaffar, 18-MS-FT-TSE-01** |
| **Supervisor** | Prof. Dr. Muzaffar Ali |
| **Thesis Title** | Thermal Stability Analysis of Metallic Oxides Based Nanofluids in Compound Parabolic Collector. |
| **Panel for External Viva** | 1. **Prof. Dr. Nadeem Ahmed Sheikh**, Dean Faculty of Mechanical Engineering, IIU Islamabad. 2. **Dr. Rubeena Kamal,** PhD Mechanical Engineering, UET Taxila. 3. **Dr. Abdul Waheed Badar**, Associate Prof., HITEC University, Taxila |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Muhammad Arslan, 18-MS-PT-TSE-03** |
| **Supervisor** | Prof. Dr. Muzaffar Ali |
| **Thesis Title** | Techno-Economic and Environmental Analysis of Hybrid Solar Space Heating System in a Subtropical Climate. |
| **Panel for External Viva** | 1. **Dr. Saba Arif, Assistant Professor,** Air University Islamabad (Kamra Campus). 2. **Dr. Abdul Waheed Badar,** Associate Prof., HITEC University, Taxila 3. **Dr. Taqi Cheema,** Ghulam Ishaq Khan Institute, Topi, Distt. Swabi. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Shoaib Ahmed, 18-MS-PT-AMD-21** |
| **Supervisor** | Engr. Rana Atta ur Rehman |
| **Thesis Title** | Process Parameters Optimization of Friction Stir Welding of Aluminum Alloy AA5451 to find Joint Efficiency |
| **Panel for External Viva** | 1. **Dr. Sajjad Ahmad**, Assistant Professor, Dept. of Mechanical Engineering, IIU Islamabad. 2. **Dr. Hafiz Sanaullah Butt**, Project Director, AWC Hassanabdal. 3. **Dr. Saeed Badshah**, Associate Professor, Dept. of Mechanical Engineering, IIU Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar & Reg.** | **Talal Bin Irshad, 17-MS-PT-PE(T)-14** |
| **Supervisor** | Dr. Abid Hussain |
| **Thesis Title** | Numerical Analysis of Thermal Management System of Li-on Batteries. |
| **Panel for External Viva** | 1. **Dr. Zeeshan Rafique**, Associate Professor, University of Lahore. 2. **Dr. Muhammad Irfan**, Assistant Professor, CUST, Islamabad. 3. **Dr. Umer**, Assistant Professor, IST Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar and Registration** | **Ahmad Altaf, 17-MS-PT-AMD-02** |
| **Supervisor** | Prof. Dr. Nazeer Ahmed Anjum |
| **Thesis Title** | Preliminary structure design of Air Craft Wing using Analytical Techniques |
| **Panel for External Viva** | 1. **Prof. Dr. Athar Masood,** Chairman Dept. of Mechanical Engineering, IIU Islamabad. 2. **Dr. Waqas Anwar,** General Manager, AWC Hassanabdal**.** 3. **Dr. Rizwan,** Deputy General Manager, PMO Taxila. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar and Registration** | **Ammar Mehboob, 18-MS-PT-TSE-08** |
| **Supervisor** | Dr. Abid Hussain |
| **Thesis Title** | Numerical Modeling of Thermal Management for Lithium-Ion Battery. |
| **Panel for External Viva** | 1. **Dr. Umer**, Assistant Professor, IST Islamabad. 2. **Dr. Emad Uddin**, HoD, Department of Mechanical Engineering. SMME. National University of Sciences and Technology Rawalpindi. 3. **Dr. Muhammad Irfan**, Assistant Professor, CUST, Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar and Registration** | **Tanzeel ur Rehman, 17-MS-PT-PE(H)-06** |
| **Supervisor** | Dr. Abid Hussain |
| **Thesis Title** | Comparative Analysis of Temperature Excursion Hybrid Techniques for Electronic Devices. |
| **Panel for External Viva** | 1. **Dr. Emad Uddin**, HoD, Department of Mechanical Engineering. SMME. National University of Sciences and Technology Rawalpindi. 2. **Dr. Muhammad Irfan**, Assistant Professor, CUST, Islamabad. 3. **Dr. Umer**, Assistant Professor, IST Islamabad. |

1. Board recommended the final progress report of below mentioned scholar and allowed him to appear for his final viva. Panel of external examiners is also recommended.

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| **Name of Scholar and Registration** | **Muhammad Essa, 18-MS-PT-PE(H)-02** |
| **Supervisor** | Dr. Abid Hussain |
| **Thesis Title** | Hybrid Thermal Management of Pin-Fin Heat Sinks. |
| **Panel for External Viva** | 1. **Dr. Emad Uddin**, HoD, Department of Mechanical Engineering. SMME. National University of Sciences and Technology Rawalpindi. 2. **Dr. Muhammad Irfan**, Assistant Professor, CUST, Islamabad. 3. **Dr. Umer**, Assistant Professor, IST Islamabad. |

**Item No. 2. Approval of The Research Topic for MSc Thesis**

Board recommended the Research Topics and Supervisor for MSc Thesis against following Scholars.

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| **Sr. No.** | **Student Name** | **Supervisor** | **Research Topics** |
| 1 | Javaria Qadeer  19-MS-ME-TSE-08 | Dr. Ajaz Bashir Janjua | Investigation of Flow Induced Vibrations of Wavy and Grooved Cross Flow Heat Exchanger. |
| 2 | Muhammad Sohail Hameed  19-MS-ME-TSE-21 | Dr. Aneela Wakeel | Development of Lead Free Soldering Material for Electronics |
| 3 | Muhammad Umar Munir  19-MS-ME-TSE-22 | Dr. Abid Hussain | Thermal Charging and Discharging Analysis of a PCM Based Energy Storage System. |
| 4 | Muhammad Muddassir Jadoon  19-MS-ME-AMD-31 | Prof. Dr. Muhammad Ali Nasir | Design and Analysis of Light Weight, Corrosion Resistant, Explosion Proof CNG/LPG Cylinder using Layered Composite. |
| 5 | Usman Zaib  19-MS-ME-AMD-22 | Prof. Dr. Muhammad Ali Nasir | Design and Analysis of Automotive Carbon Fiber Composite Bumper. |
| 6 | Muhammad Usman  19-MS-ME-AMD-43 | Prof. Dr. Muhammad Ali Nasir | Design and Analysis of Light Weight Carbon Fiber Based Tennis Racket. |
| 7 | Tamoor Ahmed  18-MS-PT-AMD-24 | Dr. Azhar Hussain | Plasma Assisted Energy Harvesting from Waste. |
| 8 | Muhammad Saeed  19-MS-AMD-29 | Prof. Dr. Muhammad Ali Nasir | Comparative Analysis of Composite Structure of a Water Immersed Radome for Strength Enhancement. |
| 9 | Hamza Fayyaz  19-MS-ME-TSE-02 | Dr. Abid Hussain | Experimental Analysis of Nano-Enhanced Phase Change Material with Different Configuration of Heat Sinks. |
| 10 | Zia ur Rehman  19-MS-ME-TSE-07 | Dr. Mubashir Gulzar | Effect of Temperature on the Friction Behavior of Epoxy Resin Composite Coating for Sliding Contact. |
| 11 | Muhammad Kamran Shaukat  19-MS-ME-AMD-03 | Dr. Mubashir Gulzar | The Influence of Fillers on Wear Behavior of Epoxy Composite Coatings for Sliding Tribo-Pair. |
| 12 | Naeem Khalid  18-MS-PT-AMD-15 | Prof. Dr. Riffat Asim Pasha | Impact of Groove Design and Post Weld Heat Treatment on the Mechanical Properties of Shielded Metal Arc Weld Joint. |
| 13. | Tanzeel ur Rehman Khan  19-MS-ME-AMD-02 | Dr. Ajaz Bashir Janjua | Design Optimization of Overhead Tank Steel Structure. |

**Item No. 3. Panel of External Examiners for PhD Final Defense**

Board recommended the Panel of External Examiners for PhD Final Defense against following PhD Scholar of Mechanical Engineering Department.

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| **Ammar ul Hassan Khawaja**  2017-UET/PhD-ME-F-08 | **Prof. Dr. Mirza Jahanzeb**  *Supervisor* | 1. **Dr. Naeem ullah Dar**   Chief Manager/ Additional DG, NDC Islamabad.   1. **Prof. Dr. Nadeem Ahmad Mufti**   Faculty of Mechanical Engineering, UET Lahore.   1. **Prof. Dr. Khalid Akhtar**   SMME, NUST Islamabad.   1. **Prof. Dr. Mohammad Abdul Aziz Irfan**   Faculty of Mechanical Engineering, UET Peshawar. |

**Item No. 4.** **Constitution of Research Monitoring Committee for PhD Studies**

Board recommended the constitution of Research Monitoring Committee for PhD Studies against following PhD Scholar of Mechanical Engineering Department.

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| **Zafar Farooq**  19-UET/PhD-ME-21 | **Dr. Syed Nasir Shah**  *Supervisor*  **Dr. Arslan Ahmed,**  Assistant Prof. Comsats Univ. Islamabad  *Co-Supervisor* | 1. **Dr. Muhammad Farooq**   Assistant Professor, National Centre of Excellence in Physical Chemistry, Univ. of Peshawar.   1. **Prof. Dr. Mohammad Younas,**   University of Engg. & Tech. Peshawar, Peshawar.   1. **Dr. Amjad Farooq,**   Associate Professor, DNE PIEAS, Islamabad.   1. **Dr. Israr ud Din,**   Assistant Professor, RCMS, NUST Islamabad.   1. **Prof. Dr. Muzaffar Ali,**   Mechanical Engineering Department, UET Taxila.   1. **Chairman (MED)** 2. **Dean** (FM & AE) 3. **Director** (ASR & TD) |

**Item No. 5.** **Course and Course Allocation of Postgraduate Studies for Semester Fall-2021.**

Board recommended the Courses to be taught and allocated relevant course teachers against them for Postgraduate Studies for Semester Fall-2021 (Annex attached)

**Item No. 6.** **Publication in National and International Conference**

Board recommended to supervisors and postgraduate students to publish their research work in National and International Conference. (Annexure attached).

The meeting ended with the vote of thanks to the chair.

***DIRECTOR PGS***

***CHAIRMAN***