**DEPARTMENT OF MECHANICAL ENGINEERING**

**UNIVERSITY OF ENGINEERING AND TECHNOLOGY** **TAXILA**

**Minutes of Meeting of Board of Post-Graduate Studies, held on 31.01.2019 at 10:00am in the Conference Room, MED**

Following were present:

* 1. Prof. Dr. Shahab Khushnood
  2. Prof. Dr. Riffat Asim Pasha (In Chair)
  3. Prof. Dr. M. Shahid Khalil
  4. Dr. Azhar Munir
  5. Prof. Dr. Muhammad Zubair Khan
  6. Dr. Muhammad Ali Nasir
  7. Dr. Muzaffar Ali (Invited Member)
  8. Dr. Hafiz Muhammad Ali (Invited Member)

Meeting started with the name of Allah Al-mighty.

**Item No. 1. Post-graduate 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.** | **Muhammad Waqas Khalid** |
| **Supervisor** | Dr. Nazeer Ahmed Anjum |
| **Thesis Title** | Investigation of case hardened depth in tool steels by using gas Nitriding & Carburizing |
| **Panel for External Viva** | 1. Dr. Waqas Anwar, Manager AWC Hassanabdal. 2. Dr. Rizwan, Manager PMO Taxila. 3. Dr. Saeed Badshah, HoD MED, 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 Saad Zahoor (14-MS-PT-AMD-06)** |
| **Supervisor** | Dr. Azhar Hussain |
| **Thesis Title** | Investigation of functionally graded materials coating to improve damping and wear resistance |
| **Panel for External Viva** | 1. Dr. Khalid Rehman, FME GIKI, Topi Swabi. 2. Dr. Azhar Munir, Director AWC Hassanabdal. 3. Dr. Ramzan Abdul Karim, FMCE GIKI, Topi 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.** | **Bilal Haider (14-MS-PT-AMD-14)** |
| **Supervisor** | Dr. Sayyid Masoodur Rehman Shah |
| **Thesis Title** | Detection of chatter as a function of cutting parameters in stainless steel plain turing. |
| **Panel for External Viva** | 1. Dr. Rizwan Malik, Dy. Director PMO Taxila 2. Prof. Dr. M. Zubair Khan, IST Islamabad. 3. Prof. Dr. Amir Sultan, Director Sub Campus UET Chakwal. |

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.** | **Waqas Javid 15-MS-P&G-PT-05** |
| **Supervisor** | Prof. Dr. Shahab Khushnood |
| **Thesis Title** | Investigation of Tip leakage flow in transonic axial flow compressor rotor 37 by using CFD analysis. |
| **Panel for External Viva** | 1. Dr. Zaheer ul Hassan, Director POF Wah Cantt. 2. Dr. Azhar Munir, Director AWC, Hassanabdal. 3. Engr. Tasheer ud din, Director Services, POF Wah Cantt. |

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.** | **Idress Azeem Rizwan (14-MS-PT-TF-16)** |
| **Supervisor** | Dr. Adnan Qasim |
| **Thesis Title** | Modeling fuel cavitation in injector nozzle flows of high torque low speed diesel engine |
| **Panel for External Viva** | 1. Prof. Dr. Athar Masood, MED, IIU Islamabad. 2. Prof. Dr. M. Zubair Khan, IST Islamabad. 3. Dr. Azhar Munir, Director AWC Hassanabdal. |

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.** | **Arslan ul Hafeez (16-MS-FT-TSE-09)** |
| **Supervisor** | Dr. Adnan Qasim |
| **Thesis Title** | Modelling thermo hydrodynamic lubrication of rough piston in high torque low speed diesel engine. |
| **Panel for External Viva** | 1. Prof. Dr. Rafi Javed Qureshi, Swedish College of Engineering, Taxila. 2. Dr. Taqi Ahmed Cheema, MED, GIKI Topi Swabi. 3. Dr. Shahid Mehmood, Asst. Prof. Sub Campus Chakwal. |

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.** | **Tufail Rehman Jadoon (16-MS-PT-TSE-14)** |
| **Supervisor** | Dr. Hafiz Muhammad Ali |
| **Thesis Title** | Performance analysis of fins and nanofluid on phase change material based photovoltaic panels. |
| **Panel for External Viva** | 1. Dr. Najam us Saqib, Dy. Director NESCOM Islamabad. 2. Dr. Ajaz Bashir Janjua, General Manager, HMC Taxila. 3. Prof. Dr. M. Zubair Khan, MED, 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 & Reg.** | **Muhammad Usman (14-MS-PT-TF-12)** |
| **Supervisor** | Dr. Muzaffar Ali |
| **Thesis Title** | Development of solar powered desalination system using flat plate solar collector. |
| **Panel for External Viva** | 1. Dr. Saeed Badshah, HoD, MED, IIU Islamabad. 2. Dr. Ajaz Bashir Janjua, General Manager, HMC Taxila. 3. Brig. Dr. Waheed Badar, General Manager, HIT Taxila. |

**Item No. 2. Topic Approval/ Synopsis for MSc Thesis**

Board recommended following Research Topics and Supervisors against following MSc Scholars.

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| **Sr. No.** | **Student Name** | **Supervisor** | **Research Topics** |
| 1 | Muhammad Kamran  17-MS-PT-PE(T)-10 | Dr. Muzaffar Ali | Experimental Investigation of Solar Thermal Parabolic Through System for Low Scale Steam Power Generation |
| 2 | Arslan Ibrahim  17-MS-PT-TSE-12 | Dr. Muzaffar Ali | Model-based Transient and Experimental Analysis of a Solar Parabolic Through Collector System |
| 3 | Tariq Mehmood  17-MS-PT-PE(T)-06 | Dr. Muzaffar Ali | Phase Change Material (PCM) Based Thermal Energy Storage with Hybrid Inorganic salts |
| 4 | Ammar Naseer  17-MS-PT-AMD-10 | Dr. Hafiz Muhammad Ali | Thermal management of photovoltaic panels using hybrid PCMs with varying thickness |
| 5 | Muhammad Mehboob  17-MS-PT-PE(T)-24 | Dr. Abid Hussain | Investigation of Thermal Storage Properties of Metal Foam Saturated with Phase Change Material |
| 6 | Waqar Ahmed  17-MS-PT-PE(T)-03 | Dr. Abid Hussain | Comparative Analysis of Heat Storage Properties of Phase Change Materials Infiltrated in Various Metal Foams |

**Item No. 3. Constitution of Research Monitoring Committee**

Board Recommended the Constitution of the Research Monitoring Committee of the following PhD Scholars**.**

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| **Sr. No.** | **Name and Regd. No.** | **Supervisor** | **Proposed RMC Members** |
| 1 | Tahir Mehmood  2017-UET/PhD-ME-F-10 | Dr. Muhammad Shahid Khalil  **Co Supervisor**  Dr. Tazeel ur Rashid | 1. **Dr. M. A. Irfan Mufti**, Professor MED, UET Peshawar. 2. **Dr. Ajaz Bashir Janjua**, General Manager, HMC Taxila. 3. **Dr. Kafait Ullah**, UPCASE, NUST Islamabad. 4. **Dr. Muzaffar Ali**, MED, UET Taxila |

**Item No. 4. MSc./PhD Courses for Semester Spring 2019**

Board Recommended the MSc/ PhD courses and relevant course teachers for semester Spring 2019. Detail is attached as Annexure-I.

**Item No. 5. Adoption of Revised Curriculum (2017) of Mechanical Engineering for Postgraduate Study Program by NCRC HEC.**

Board recommended the adoption of revised curriculum (2017) of Mechanical Engineering proposed by National Curriculum Revision Committee (NCRC) HEC for Postgraduate Study Programs.

**Item No. 6. PhD Supervision for 2018 Entry**

The Director PGS presented some issues of PhD Candidates of Entry 2018 regarding their admission highlighted by Director ASR & TD.

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| **Sr.No.** | **Candidate Name** | **Proposed Supervisor** | **Issue** |
| 1 | Arslan Hussain | Dr. Nazeer Ahmed Anjum | Supervisor is not HEC Approved |
| 2 | Umer Siddique | Dr. Abid Hussain | Supervisor is not HEC Approved |
| 3 | Muhammad Adnan | Dr. Waqar Qureshi | Supervisor is not HEC Approved |

The Board recommended that the scholars may be granted admission provisionally; meanwhile their supervisors are directed to ensure the availability of HEC letter for approved supervisor within three months.

**Item No. 7. Launching MSc Program at UET Taxila Sub Campus Chakwal**

Board recommended the launching of MSc in Mechatronics Engineering Program at UET Taxila sub Campus Chakwal with Details is as under:

* **Admission Criteria**: BSc in Mechanical, Electrical, Industrial, Electronics, Computer, Software, Manufacturing, Mechatronic Engineering (CGPA 2.5 or above)
* **Courses**: The Detail of recommended courses to be taught is attached as Annex-III.
* **Industry Academia Linkage**: The Recommended Industrial Experts are
  + - * + Dr. Muzaffar Ali (Energy)
        + Dr. Azhar Hussain (Materials)
        + Dr. Tanzeel ur Rashid (Mechanical)
* Mechatronics Engineering Department will apply for the NOC from HEC before the launching of MSc Program after approval from Board of Faculty of Mechanical and Aeronautical Engineering and Academic Council.
* All the Faculty Members of Mechatronics Engineering Department having PhD Degree will apply for HEC approved Supervisor.
* PhD in Mechatronics Engineering is deferred.

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

***DIRECTOR, PGS***

***CHAIRMAN***