**DEPARTMENT OF MECHANICAL ENGINEERING**

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

**Minutes of Meeting of Board of Post-Graduate Studies, held on 16.01.2018 at 02:00pm 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. Prof. Dr. Khawaja Sajid Bashir
	5. Dr. Azhar Munir
	6. Dr. Ajaz Bashir Janjua
	7. Dr. Muhammad Ali Nasir

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. Thesis Title:

“**Finite element analysis of deflection of ionic polymer metal composite (IPMC) as holding device for biomedical applications**”.

Scholar Name and Regd. No.: Obaid ullah Khan 15-MS-AMD-PT-13

Supervisor: Dr. Aneela Wakeel

Board recommended the above final progress report and allowed him to appear for his final viva. Panel of external examiners was also recommended by the Board.

1. Thesis Title:

“**Design, installation and improvement of seasonal production of biogas plant”.**

Scholar Name and Regd. No.: Muhammad Tanveer 13-MS-PT-TF-08

Supervisor: Dr. Tanzeel ur Rasheed

Board recommended the above final progress report and allowed him to appear for his final viva. Panel of external examiners was also recommended by the Board.

**Item No. 2** **MSc Research Topic Approval/Synopsis**

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Student Name** | **Supervisor** | **Research Topics** |
| 1 | Waqas Javaid15-MS-PT-P&G-05 | Prof. Dr. Shahab Khushnood | Investigation of tip leakage flow in transonic axial flow compressor rotor 37, by using CFD analysis. |
| 2 | Fouzia Begum14-MS-PT-TF-05 | Dr. Muzaffar Ali | Transient Simulation of an integrated solar assisted desiccant cooling system with Maisotsenka cycle in different climate zones of Pakistan. |
| 3 | Naeem ur Rahman15-MS-PT-P&G-06 | Prof. Dr. Shahab Khushnood | Numerical investigation of flow around heat exchanger tube bundle with different surrounding tube array configuration. |
| 4 | Rehan Saghir16-MS-PT-AMD-08 | Dr. Nazeer Anjum | Investigation of cutting parameters using optimum MQL technique in turning process. |
| 5 | Muhammad Zia 15-MS-PE(T)-PT-02 | Dr. Ajaz Bashir Janjua | Optimizing the effect of stiffening ring on a vessel under external pressure by numerical analysis. |
| 6 | Ghazala Bibi15-MS-PT-TSE-05 | Dr. Muzaffar Ali  | Efficient configuration selection of a solar desiccant cooling system through model-based simulation approach. |
| 7. | Salluhuddin16-MS-PT-TSE-09 | Dr. H. M. Ali  | Condensate retention of water-methanol mixture on integral fin tubes. |
| 8 | Muhammad Sajawal15-MS-PT-TSE-12 | Dr. H. M. Ali | An experimental investigation of performance of a double pass solar air heater using PCMs of different melting points in finned aluminum tubes to enhance thermal storage and conductivity.  |
| 9 | Hafiz Muhammad Habib16-MS-PT-TSE-06 | Dr. H. M. Ali | Investigation of condensate retention on horizontal pin-fin tube using mixture of water-propanol. |

**Item No. 3. Change of PhD Supervisor**

Board recommended the change of PhD Supervisor for the following PhD Scholar.

|  |  |  |
| --- | --- | --- |
| **Scholar Name and Reg.** | **Current Supervisor** | **New Supervisor** |
| Awais Hamza16-UET/PhD-ME-100 | Prof. Dr. Shahab Khushnood | Dr. Waqar Qureshi |

**Item No. 4 Change in Research Monitoring Committee**

Board recommended the change in Research Monitoring committee for the following PhD scholars.

|  |  |  |
| --- | --- | --- |
| **Name and Reg.** | **Previous RMC Members** | **New RMC Members** |
| Zulfiqar Khattak**13-UET/PhD-ME-78** | 1. Dr. Hafiz Muhammad Ali
2. Dr. Ajaz Bashir Janjua
3. Dr. M. Asim Jadoon
4. **Dr. M. Hamayun**
5. Dr. Muzaffar Ali
 | 1. Dr. Hafiz Muhammad Ali
2. Dr. Ajaz Bashir Janjua
3. Dr. M. Asim Jadoon
4. **Dr. Najam us Saqib**
5. Dr. Muzaffar Ali
 |
| **Fazle Hadi**13-UET-PhD-ME-77 | 1. Dr. Hafiz Muhammad Ali
2. Dr. Ajaz Bashir Janjua
3. Dr. M. Asim Jadoon
4. **Dr. M. Hamayun**
5. Dr. Muzaffar Ali
 | 1. Dr. Hafiz Muhammad Ali
2. Dr. Ajaz Bashir Janjua
3. Dr. M. Asim Jadoon
4. **Dr. Najam us Saqib**
5. Dr. Muzaffar Ali
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**Item No. 5 MSc/PhD Course allotment for Semester Spring 2018.**

Board recommended the courses to be taught in MSc/PhD for Semester Spring 2018 along with relevant course teachers.

**Item No. 6 Faculty Research Grants Proposals**

Board recommended the following research grant proposals submitted by faculty members of Mechanical Engineering Department for year 2018.

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| --- | --- | --- | --- |
| **Sr. #** | **Title** | **Principle Investigator** | **Amount Requested** |
|  | Development of improved toughness composite inspired by nature | Dr. Azhar Hussain | 1,600,00/- |
|  | Enhancing Fatigue Resistance of Aluminum Alloys by Incorporating Smart Materials | Dr. Azhar Hussain | 845000/- |
|  | Passive cooling of Heat Sinks by Nano -Phase Change Materials | Dr. Hafiz Muhammad Ali | 15,00,000/- |
|  | PV Modules Thermal Management | Dr. Hafiz Muhammad Ali | 15,00,000/- |
|  | Heat transfer coefficients measurements for mini channels | Dr. Hafiz Muhammad Ali | 15,00,000/- |
|  | Structural Health monitoring of composites using grapheme nano platelets | Dr. Muhammad Ali Nasir | 9,95,000/- |
|  | Development and Characterization of single Network (SN), double Network (DN) Hydro gels for Building Cooling Application | Dr. Muhammad Ali Nasir | 12,79,600/- |
|  | Development and Characterization of 2D Woven Auxetic Composites for Advance Applications | Dr. Muhammad Ali Nasir | 7,89,400/- |
|  | Improvement in stress corrosion cracking resistance of austenitic stainless steel through thermo-mechanical treatment | Dr. Aneela Wakeel | 2,755,000/- |
|  | Transient Simulation and Experimental Analysis of an Efficient Configuration of Solar Assisted Desiccant Cooling System | Dr. Muzaffar Ali | 1,171,500/- |
|  | Development and Experimental Performance investigation of a solar assisted hybrid (Desiccant + absorption) cooling system with efficient generator design  | Dr. Muzaffar Ali | 1,250,000/- |
|  | Model transient simulation and experimental investigation of compound parabolic trough solar collector (CPC) using Nano-fluids. | Dr. Muzaffar Ali | 1,142,000/- |

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

***DIRECTOR, PGS***

***CHAIRMAN***