#### **Summer School**

07<sup>th</sup> Sep -28<sup>th</sup> Sep 2018













11 students of School of Physiotherapy RK. University accompanying by one of the Faculty visited Wroclaw University of Science and technology, Poland for a 3 week Summer Course on **Selected Biomedical Engineering Methods in Preventive, Predictive and Personalized Medicine and Physiotherapy** Organized by Department of Biomedical Engineering in cooperation with Wroclaw University school of Physical Education, Faculty of Physiotherapy and Regional Specialist Hospital, Wroclaw, Poland in addition to that sightseeing around Poland for 2 weekend is also provided by the **Wroclaw University of Science and Technology** 



Opening ceremony of a 3-Week Summer Course on Selected Biomedical Engineering Methods in Preventive, Predictive and Personalized Medicine and Physiotherapy







### 1<sup>st</sup> Week

# Fundamentals of IR Imaging in Physiotherapy

The students were divided in to two groups for most of the session which runs parallel.

The session was divided in to theory and practical, the theory part was taken by Prof. Halina Podbielska and the Practical Part was taken by Ms. Joanna Bauer. Students done hands on session with IR Camera and submit 5 reports individually which was evaluated for the grades they had received after the course completion.

The theory section was evaluated by an exam which was conducted after the theory session. It was the first-hand experience of the students with the Infra-red camera and use of this camera to diagnose certain disorder and make a report with the help of software which student should install to get report from the Thermal Images.

Student test some of the objects which emits IR Radiation and some of the pre-clicked pictures of Human beings and submitted the report of the same submission rate is 100% and both the faculties are very satisfied with our student efforts and very impressed with the ability of students to grasp this technology very quickly.







#### 2<sup>nd</sup> Week

#### Introduction to Predictive, Preventive and Personalized Medicine and Physiotherapy

The students were divided in to two groups for most of the session which runs parallel

These sessions were conducted in Department of Biomedical Engineering, Wroclaw University of Science and Technology (WrUST) and the sessions were conducted by Prof. Halina Podbielska & Aleksandra Kaczorowska. Students also made reports on the Histologic slide which they view in Different Lights and make out the difference in them in different optics. The Practical sessions was very similar to the histology practical.

The parallel sessions were also conducted at School of Physical Education in which student did Practical session with some of the very recent modalities in terms of technology like Galvanic Current, Ultrasound, Magnetic Chamber etc. The session was taken by and Ms. Aneta Demidaś.

Students saw first time the use of Galvanic Current for the Pain relief and learn some of the very recent concepts about the Dosage of the electrotherapy Instruments.

Students visited Berlin on weekend







## 3<sup>rd</sup> Week

Bio-optics and Bio photonics for Predictive, Preventive and Personalized Medicine.

In this last week again, the student was exposed to the Bio-optics and Preventive Medicine at Department of Biomedical Engineering in cooperation with Wroclaw University school of Physical Education, Faculty of Physiotherapy and Regional Specialist Hospital,Wroclaw,Poland.

They also experience the Cryo stimulation with temperature around -60 degree Celsius and IR Sona it was an experience which is not available in India in Physiotherapy set up and the exposure itself motivate the students to explore new horizons in the field of Physiotherapy.

The Faculty of these session were Ms. Aneta Demidaś, Ela Szul and Magdalena Przybyło.

The closing ceremony was held at Regional Specialist Hospital, Wroclaw, Poland which was attended by the Dean of the Department of Department of Biomedical Engineering WrUST AND THE Certificate of Course are awarded to the students.

The education tour ended on a great note where students went to cities like Prague, Nuremberg, Munich and Frankfurt