

## Programme of the Autumn School “Nanotechnology and biomedical engineering”

Organized by the Technical University of Moldova, under the Horizon 2020 research and innovation programme, grant agreement No 810652

| 14.09.19                          |  |   |
|-----------------------------------|--|---|
| <b>Lecture 1</b><br>9.00 – 10.20  | Acad. Ion Tighineanu<br>Academy of Sciences of Moldova                               | Introduction in Nanotechnology and Nanomedicine                             |
| 10.20 – 11.00                     | <i>Coffee break &amp; discussions</i>  |   |
| <b>Lecture 2</b><br>11.00 – 12.20 | Dr. Anella Seddon<br>University of Bristol, UK                                       | Molecular self-assembly for drug delivery and nano-scale characterization   |
| 12.20 – 13.20                     | <i>Lunch</i>   |   |
| <b>Lecture 3</b><br>13.20 – 14.40 | Prof. Viorel Nacu<br>“Nicolae Testemițanu” State University of Medicine and Pharmacy | Introduction in tissue engineering, biocompatible materials, and stem cells |
| 14.40 – 15.00                     | <i>Coffee break &amp; discussions</i>  |   |
| <b>Lecture 4</b><br>15.00 – 16.20 | Dr. Serghei Railean<br>Technical University of Moldova                               | Advanced techniques of signal processing in biomedical engineering          |
| 15.09.19                          |  |   |
| <b>Lecture 1</b><br>9.00 – 10.20  | Prof. Victor Sontea<br>Technical University of Moldova                               | Biomedical Engineering  |
| 10.20 – 11.00                     | <i>Coffee break &amp; discussions</i>  |   |
| <b>Lecture 2</b><br>11.00 – 12.20 | Dr. Tudor Braniste<br>Technical University of Moldova                                | Nanomaterials for bio-medical applications                                  |
| 12.20 – 13.20                     | <i>Lunch</i>   |   |
| <b>Lecture 3</b><br>13.20 – 14.40 | Dr. Eduard Monaico<br>Technical University of Moldova                                | Electrochemistry in nanofabrication and microfluidics                       |
| 14.40 – 15.00                     | <i>Coffee break &amp; discussions</i>  |   |
| <b>Lecture 4</b><br>15.00 – 16.20 | Prof. Veaceslav Ursachi<br>Academy of Sciences of Moldova                            | Nano-optoelectronics and nanophotonics                                      |

| 16.09.19                          |  |  |
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| <b>Lecture 1</b><br>17.00 – 18.20 | Dr. Serghei Cebotari / Dr. Igor Tudorache<br>Hannover Medical School,<br>Germany                   | Artificial Organs and transplantation  |
| 18.20 – 18.40                     | <i>Coffee break &amp; discussions</i>  |  |
| <b>Lecture 2</b><br>18.40 – 20.00 | Prof. Ghenadie Curocichin<br>"Nicolae Testemițanu" State<br>University of Medicine and<br>Pharmacy | Nanotechnologies in genetic testing  |
| 17.09.19                          |  |  |
| <b>Lecture 1</b><br>16.00 – 17.00 | Dr. Andres Hilfiker<br>Hannover Medical School,<br>Germany   | Cardiovascular tissue engineering  |
| <b>Lecture 2</b><br>17.10 – 18.20 | Dr. Andrei Sarua<br>University of Bristol, UK  | Plasmonics for biochemical sensing   |
| 18.20 – 18.40                     | <i>Coffee break &amp; discussions</i>  |  |
| <b>Lecture 3</b><br>18.40 – 20.00 | Prof. Hidenori Mimura<br>Shizuoka University, Japan  | Fabrication of highly aligned CNT sheets and their application to strain sensors |
|                                   | Prof. Toru Aoki<br>Shizuoka University, Japan  | X-ray detection and imaging  |
| 18.09.19 – 20.09.19               |  |  |
| 9.00 – 18.00                      | Participation at the 4th International Conference on Nanotechnologies and Biomedical Engineering   |  |