

# PROGRAMME

## Sunday, May 27<sup>th</sup>

14:00 Registration in the entrance hall of the J. Heyrovský Institute  
 15:00 Departure of a special bus from the J. Heyrovský Institute  
 (Dolejšková 3, Prague 8 – Kobylisy)  
 17:00 Arrival at the Castle Třešť, Registration  
 19:00 Welcome buffet

## Monday, May 28<sup>th</sup>

7:00-  
 9:00 Breakfast

|              |                           |                        |                                                                                                                             |
|--------------|---------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>9:00</b>  | <b>Morning session:</b>   |                        |                                                                                                                             |
|              | Opening of the Discussion |                        |                                                                                                                             |
| <i>Time</i>  | <i>Chairman</i>           | <i>Speaker</i>         | <i>Title of presentation</i>                                                                                                |
| 9:05-10:05   | M. Kalbáč                 | <b>S. Reich</b>        | <b>Surface- and tip-enhanced Raman scattering on carbon nanostructures</b>                                                  |
| 10:05-10:25  |                           | V. Valeš               | Enhanced Raman scattering on functionalized graphene substrates                                                             |
| 10:25-10:45  |                           | S. Heeg                | Carbon nanotube chirality determines properties of encapsulated long linear carbon chains                                   |
| 10:45        | Coffee break              |                        |                                                                                                                             |
| <i>Time</i>  | <i>Chairman</i>           | <i>Speaker</i>         | <i>Title of presentation</i>                                                                                                |
| 11:05-11:45  | S. Reich                  | <u>K. Bolotin</u>      | Excitons in two-dimensional semiconductors “talking” to their environment                                                   |
| 11:45-12:05  |                           | M. Hulman              | Spectroscopy of horizontally and vertically aligned thin MoS <sub>2</sub> films                                             |
| 12:05-12:25  |                           | F. Karlický            | Fluorographane C <sub>2</sub> FH: stable and wide band gap insulator with huge excitonic effect                             |
| 12:25        | Lunch                     |                        |                                                                                                                             |
| <b>14:30</b> | <b>Afternoon session:</b> |                        |                                                                                                                             |
| <i>Time</i>  | <i>Chairman</i>           | <i>Speaker</i>         | <i>Title of presentation</i>                                                                                                |
| 14:30-15:10  | K. Bolotin                | <u>S. Berciaud</u>     | Charge and energy transfer in two-dimensional heterostructures                                                              |
| 15:10-15:30  |                           | <u>A. Lopez-Ortega</u> | Plasmon Induced Magneto-Optical Enhancement in Metallic Ag/FeCo Core/Shell Nanoparticles Synthesized by Colloidal Chemistry |
| 15:30-15:50  |                           | H. Tarabkova           | Electrochemically Controlled Winding and Unwinding of HOPG Supported Carbon Nanoscroll                                      |
| 15:50        | Coffee break + Posters    |                        |                                                                                                                             |

| Time                                                      | Chairman                   | Speaker                           | Title of presentation                                                                                                                     |
|-----------------------------------------------------------|----------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 16:20-17:00                                               | U. Wurstbauer              | <a href="#">A. Ciesielski</a>     | 2D materials: preparation, functionalization and application in sensing                                                                   |
| 17:00-17:20                                               |                            | P. Kovaříček                      | Chemistry on and with graphene: Introducing Selectivity, Functionality and Motion                                                         |
| 17:20-17:40                                               |                            | J. Plšek                          | Fluorinated Graphene on Copper – Reactivity Driven by Support Phase Orientation and Decomposition under Heat Treatment                    |
| 17:40-18:00                                               |                            | K. Drogowska                      | Effect of hydrogenation on the particular layer in isotopically labelled Turbostratic- and Bernal stacked bilayer graphene                |
| 18:30 Buffet dinner followed by beer degustatin + Posters |                            |                                   |                                                                                                                                           |
| <b>Tuesday, May 29<sup>th</sup></b>                       |                            |                                   |                                                                                                                                           |
| 7:00- Breakfast                                           |                            |                                   |                                                                                                                                           |
| 9:00                                                      |                            |                                   |                                                                                                                                           |
| <b>9:00</b>                                               | <b>Morning session:</b>    |                                   |                                                                                                                                           |
| Time                                                      | Chairman                   | Speaker                           | Title of presentation                                                                                                                     |
| 9:00-9:40                                                 | A. Grüneis                 | <a href="#">J. Kotakoski</a>      | Atomic-Scale Defect-Engineering of 2D Materials with Electron and Ion Beam                                                                |
| 9:40-10:00                                                |                            | N. Bendiab                        | Defects and interlayer coupling in in van der Waals heterostructures                                                                      |
| 10:00-10:20                                               |                            | M. Dopita                         | X-ray Scattering on Highly Perturbed Carbon Nanomaterials                                                                                 |
| 10:20 Coffee break                                        |                            |                                   |                                                                                                                                           |
| Time                                                      | Chairman                   | Speaker                           | Title of presentation                                                                                                                     |
| 10:50-11:30                                               | J. Kotakoski               | <a href="#">A. Krasheninnikov</a> | Electron Irradiation-Induced Defects and Phase Transformations in Two-Dimensional Transition Metal Dichalcogenides                        |
| 11:30-12:10                                               |                            | <a href="#">U. Wurstbauer</a>     | In-situ spectroelectrochemistry of catalytically active sites in molybdenum dicalcogenide mono- and fewlayers for HER                     |
| 12:10 Lunch                                               |                            |                                   |                                                                                                                                           |
| 14:00                                                     |                            |                                   |                                                                                                                                           |
| <b>Afternoon session:</b>                                 |                            |                                   |                                                                                                                                           |
| Time                                                      | Chairman                   | Speaker                           |                                                                                                                                           |
| 14:00-14:40                                               | J. Kalbáčová<br>Vejpravová | <a href="#">A. Gomez Roca</a>     | Magnetoplasmonic Heterostructures for Theranostic Applications                                                                            |
| 14:40-15:00                                               |                            | J. Honolka                        | Single 3d transition metal atoms on multi-layer graphene systems: electronic configurations, bonding mechanisms and role of the substrate |
| 15:00-15:20                                               |                            | J. Červenka                       | Electronic detection of DNA on graphene                                                                                                   |
| 15:20-15:40                                               |                            | A. Poryvai                        | Multi-responsive nanocomposites based on liquid crystals                                                                                  |
| 16:10 Departure for Jihlava Brewery for tour and dinner   |                            |                                   |                                                                                                                                           |
| 22:00 Return from Jihlava Brewery                         |                            |                                   |                                                                                                                                           |

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|---------------------------------------------------------------|-------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Wednesday, May 30<sup>th</sup></b>                         |                         |                      |                                                                                                                          |
| 7:00-                                                         |                         |                      |                                                                                                                          |
| 9:00                                                          | Breakfast               |                      |                                                                                                                          |
| 9:00                                                          | <b>Morning session:</b> |                      |                                                                                                                          |
| <i>Time</i>                                                   | <i>Chairman</i>         | <i>Speaker</i>       | <i>Title of presentation</i>                                                                                             |
| 9:00-9:40                                                     | A. Krasheninnikov       | <u>A. Grüneis</u>    | Resonance Raman spectrum of epitaxial graphene doped towards the Lifshitz transition                                     |
| 9:40-10:20                                                    |                         | <u>O. Fenwick</u>    | Thermoelectric properties of thin films                                                                                  |
| 10:20-10:40                                                   |                         | V. Skakalova         | Graphitization of diamond through different routes                                                                       |
| 10:40 Coffee break                                            |                         |                      |                                                                                                                          |
| <i>Time</i>                                                   | <i>Chairman</i>         | <i>Speaker</i>       | <i>Title of presentation</i>                                                                                             |
| 11:10-11:30                                                   | R. Korytar              | J. Kunc              | Back-gated epitaxial graphene on SiC                                                                                     |
| 11:30-11:50                                                   |                         | P. Janda             | Quasi-2D Liquid Nanofoam on Water-Immersed Solid Surface                                                                 |
| 11:50-12:10                                                   |                         | H. Shiozawa          | Physical properties of metal-organic frameworks doped with TCNQ                                                          |
| 12:10 Lunch                                                   |                         |                      |                                                                                                                          |
| 14:30 Departure to Telč (Castle tour and general sightseeing) |                         |                      |                                                                                                                          |
| 17:30 Departure from Telč                                     |                         |                      |                                                                                                                          |
| 19:30 Conference Dinner back in Třešť                         |                         |                      |                                                                                                                          |
| <b>Thursday, May 31<sup>st</sup></b>                          |                         |                      |                                                                                                                          |
| 7:00-                                                         |                         |                      |                                                                                                                          |
| 9:00 Breakfast                                                |                         |                      |                                                                                                                          |
| 9:00                                                          | <b>Morning session:</b> |                      |                                                                                                                          |
| <i>Time</i>                                                   | <i>Chairman</i>         | <i>Speaker</i>       | <i>Title of presentation</i>                                                                                             |
| 9:00-9:40                                                     | O. Fenwick              | <u>J. Parthenios</u> | Controllable synthesis of highly crystalline single and few layer MoS <sub>2</sub> and the role of growth-induced strain |
| 9:40-10:00                                                    |                         | V. Guerra            | Graphene as substrate for selective self-assembly of 2-D materials for optoelectronic applications                       |
| 10:00 Coffee break                                            |                         |                      |                                                                                                                          |
| <i>Time</i>                                                   | <i>Chairman</i>         | <i>Speaker</i>       | <i>Title of presentation</i>                                                                                             |
| 10:30-11:10                                                   | J. Parthenios           | <u>R. Korytar</u>    | Transport and incommensurate quantum-size oscillations in oligoacene molecular wires                                     |
| 11:10-11:30                                                   |                         | O. Frank             | 2D-3D Interfaces from the Topography Standpoint                                                                          |
| 11:30-11:50                                                   |                         | T. Verhagen          | Mastering the topography of graphene                                                                                     |
| 11:50 Lunch                                                   |                         |                      |                                                                                                                          |
| 13:30 Departure for Prague                                    |                         |                      |                                                                                                                          |