

## Workshop of the COST Innovators Grant project IG20129 INDICO

19-20 February 2026

Frankfurt Innovation Center (FIZ)

Altenhöferallee 3, 60438 Frankfurt am Main, Germany

### Scientific programme

#### Thursday, 19 February

09 <sup>15</sup> – 10 <sup>00</sup>	<b>Participants registration</b>
10 <sup>00</sup> – 10 <sup>15</sup>	<b>Workshop opening</b>
10 <sup>15</sup> – 11 <sup>00</sup>	<b><u>Morning session I (Chair: Alexey Verkhovtsev)</u></b> <b>Andrey Solov'yov</b> , MBN Research Center, Frankfurt, Germany <i>State of the art in multiscale modelling of irradiation-driven processes: A FEBID case study</i>
11 <sup>00</sup> – 11 <sup>30</sup>	<b>Coffee break</b>
11 <sup>30</sup> – 12 <sup>00</sup>	<b><u>Morning session II (Chair: Ivo Utke)</u></b> <b>Amalio Fernández-Pacheco</b> , TU Wien, Vienna, Austria <i>Layer-by-layer nanoscale 3D printing using focused electron beam induced deposition</i>
12 <sup>00</sup> – 12 <sup>25</sup>	<b>Miloš Hrabovský</b> , TESCAN Group, Brno, Czech Republic <i>SEM in Prototyping: what lies ahead for basic material research, the limits and outlooks</i>
12 <sup>25</sup> – 12 <sup>50</sup>	<b>Katja Höflich</b> , Ferdinand-Braun-Institut, Berlin, Germany <i>Area-selective chemical vapor deposition of gold by electron beam seeding</i>
12 <sup>50</sup> – 13 <sup>50</sup>	<b>Lunch</b>
13 <sup>50</sup> – 14 <sup>15</sup>	<b><u>Afternoon session I (Chair: Nigel Mason)</u></b> <b>Ilia Solov'yov</b> , Carl von Ossietzky University, Oldenburg, Germany <i>Stochastic dynamics simulation of the FEBID process: The case study of a nanowire growth</i>
14 <sup>15</sup> – 14 <sup>40</sup>	<b>Alexey Verkhovtsev</b> , MBN Research Center, Frankfurt, Germany <i>Stochastic dynamics simulation of the FEBID process: The case study of a nanopillar growth</i>
14 <sup>40</sup> – 15 <sup>05</sup>	<b>Ivo Utke</b> , EMPA, Thun, Switzerland <i>Complementary modeling approaches: Continuum &amp; kinetic Monte Carlo simulations for FEBID</i>
15 <sup>05</sup> – 15 <sup>30</sup>	<b>Cauê Souza</b> , University of Kent, Canterbury, United Kingdom <i>Excited-state dissociation of (<math>\eta^4</math>-diene)Ru(CO)<sub>3</sub> precursors for photo-assisted chemical vapour deposition</i>
15 <sup>30</sup> – 16 <sup>00</sup>	<b>Group photo &amp; Coffee break</b>
16 <sup>00</sup> – 16 <sup>25</sup>	<b><u>Afternoon session II (Chair: Jaroslav Kočíšek)</u></b> <b>Juraj Fedor</b> , J. Heyrovský Institute of Physical Chemistry, Prague, Czech Republic <i>Combining experiments and modelling to improve insight into FEBID</i>
16 <sup>25</sup> – 16 <sup>50</sup>	<b>Nigel Mason</b> , University of Kent, Canterbury, United Kingdom <i>Establishing a data base for modelling 3D nanoprinting</i>
16 <sup>50</sup> – 17 <sup>15</sup>	<b>Vincenzo Guidi</b> , University of Ferrara, Italy <i>Operando diagnosis of chemisorbed molecular species on the surface of functional nanostructured materials for gas sensing</i>
17 <sup>15</sup> – 17 <sup>40</sup>	<b>Felipe Fantuzzi</b> , University of Kent, Canterbury, United Kingdom <i>Unpassivated edges as gateways to collision-driven topological transitions in finite graphene nanoflakes</i>
from 18 <sup>00</sup>	<b>Social dinner (Restaurant “Zum Lahmen Esel”, Krautgartenweg 1, 60439 Frankfurt)</b>

Friday, 20 February

<p>09<sup>30</sup> – 09<sup>55</sup></p> <p>09<sup>55</sup> – 10<sup>20</sup></p> <p>10<sup>20</sup> – 10<sup>50</sup></p>	<p><b><u>Morning session II (Chair: Amalio Fernandez-Pacheco)</u></b></p> <p><b>Iwona Szymańska</b>, Nicolaus Copernicus University in Toruń, Toruń, Poland <i>The usefulness of new FEBID precursors of group 10 and 11 metals for the 3D nanostructures growth</i></p> <p><b>Krzysztof Maćkosz</b>, EMPA, Thun, Switzerland <i>Transmission electron microscopy and atom probe tomography to characterize granular materials obtained by focused electron beam induced deposition</i></p> <p><b>José Maria De Teresa</b>, Instituto de Nanociencia y Materiales de Aragón, Zaragoza, Spain <i>Growth of 3D nanotips by Focused Electron Beam Induced Deposition (FEBID) and their applications</i></p>
<p>10<sup>50</sup> – 11<sup>20</sup></p>	<p><b>Coffee break</b></p>
<p>11<sup>20</sup> – 11<sup>45</sup></p> <p>11<sup>45</sup> – 12<sup>10</sup></p> <p>12<sup>10</sup> – 12<sup>35</sup></p>	<p><b><u>Morning session II (Chair: José Maria De Teresa)</u></b></p> <p><b>Anpan Han</b>, Technical University of Denmark, Roskilde, Denmark <i>Ice lithography: recent progress opens a new frontier of opportunities</i></p> <p><b>Søren Isaksen</b>, Copenhagen Microsystems ApS, Roskilde, Denmark <i>Copenhagen Microsystems</i></p> <p><b>Jaroslav Kočíšek</b>, J. Heyrovský Institute of Physical Chemistry, Prague, Czech Republic <i>Electron and ion interactions with iron pentacarbonyl and its clusters</i></p>
<p>12<sup>35</sup> – 13<sup>30</sup></p>	<p><b>Lunch</b></p>
<p>13<sup>30</sup> – 14<sup>00</sup></p> <p>14<sup>00</sup> – 14<sup>25</sup></p>	<p><b><u>Afternoon session (Chair: Juraj Fedor)</u></b></p> <p><b>Michael Huth</b>, Goethe University, Frankfurt, Germany <i>Influence of long-time exposure in the strong depletion regime of FEBID on the phase formation of deposits</i></p> <p><b>Sven Barth</b>, Goethe University, Frankfurt, Germany <i>FEBID and FIBID: Differences, commonalities, and challenges in precursor development</i></p>
<p>14<sup>25</sup> – 14<sup>30</sup></p>	<p><b>Workshop closing</b></p>
<p>14<sup>30</sup> – 15<sup>30</sup></p>	<p><b>CIG INDICO Team meeting (internal discussion for CIG Team members)</b></p>