



KEMIJSKI INŠTITUT

Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

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Velika predavalnica Kemijskega inštituta /
Great Lecture Hall
National Institute of Chemistry
Hajdrihova 19, Ljubljana, Slovenia

**Electrochemically Induced Asymmetry:
from Molecules and Materials to Motion and Back**

Asymmetry is a very common feature that we encounter and use in our daily life. Chemists have developed various approaches to generate asymmetry, from the molecular to the macroscopic scale, and this seminar illustrates how electrochemistry can make original contributions to the topic.

At the molecular level, it is possible to use specifically designed electrodes for the analysis, separation and synthesis of chiral molecules.

From a point of view of materials science, asymmetric so-called Janus objects with complex surface features can also be electrogenerated in a straightforward way, at the nano- micro and macro-scopic scale.

As asymmetry is also a mandatory attribute for inducing directed motion, electrochemical phenomena can be furthermore advantageously employed to fuel dynamic systems, exhibiting interesting features when they are used for example as actuators or swimmers. The latter can then in turn serve again for the efficient synthesis of chiral molecules, thus closing the loop.

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Vljudno vabljeni / Kindly invited