





#### Marie Skłodowska-Curie Actions-Innovative Training Networks H2020-MSCA-ITN-2018: BIKE 813748

#### **TRAINING EVENT 2**

Preparation and characterization of catalysts for hydrogen production



24-26 June 2020
Institute of Organic Chemistry with Centre of Phytochemistry
Bulgarian Academy of Sciences, Sofia, Bulgaria

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Innovative Training Networks (MSCA-ITN), grant agreement 813748

#### **TRAINING EVENT 2**

# Preparation and characterization of catalysts for hydrogen production

24-26 June 2020, Sofia, Bulgaria

## **PROGRAMME**

#### **Organizing committee**

- Prof. DSc. Tanya TSONCHEVA
- Prof. Dr. Nartzislav PETROV
- Assoc. Prof. Dr. Momtchil DIMITROV
- Assoc. Prof. Dr. Boyko TSYNTSARSKI
- Ass. Prof. Dr. Gloria ISSA
- Ass. Prof. Dr. Radostina IVANOVA

# Wednesday, 24<sup>th</sup> June 2020

9:00-9:15 (CET) **Opening ceremony** 9:15- 10:00 (CET) **Sonia Damyanova:** *Methane* reforming to hydrogen over supported catalysts **Momtchil Dimitrov:** Synthesis of 10:15-11:00 (CET) mesoporous oxides as catalysts or catalytic supports for various redox processes 11:00-11:30 (CET) Break 11:30-12:15 (CET) Pavletta Shestakova: Solid state NMR spectroscopy: basic principles and applications in heterogeneous catalysis

### Thursday, 25<sup>th</sup> June 2020

| Daniela Kovacheva: Application of powder X-Ray         |
|--|
| Diffraction method for catalysts characterization      |
| Daniela Karashanova: Transmission Electron             |
| Microscopy: from the principles to the opportunity for |
| analysis of catalytic materials                        |
| Break  |
| Kristina Chakarova: Characterization of solid surface  |
|  |

using IR spectroscopy of probe molecules

12:15-13:00 (CET)

Alexander Eliyas: Kinetic and mechanism of catalytic reactions

## Friday, 26<sup>th</sup> June 2020

| 9:00- 9:45 (CET)  | <b>Boiko Tsyntsarski:</b> New carbon materials - methods of synthesis |
|-------------------|---|
| 10:00-10:45 (CET) | <b>Tanya Tsoncheva:</b> "Green catalysts" for hydrogen production     |
| 10:45-11:15 (CET) | Break   |
| 11:15-12:00 (CET) | Denitsa Yancheva: Multi-analytical study of solid                     |
|                   | materials: application of vibrational spectroscopy                    |
|                   | combined with X-Ray and electron microscopy methods                   |

**12:15-12:25 (CET)** Closing ceremony