



**Consiglio Nazionale
delle Ricerche**

Istituto di Chimica dei Composti Organometallici (ICCOM)

ALLEGATO B

DICHIARAZIONI SOSTITUTIVE DI CERTIFICAZIONI

(art. 46 D.P.R. n. 445/2000)

DICHIARAZIONI SOSTITUTIVE DELL'ATTO DI NOTORIETÀ

(art. 47 D.P.R. n. 445/2000)

..la sottoscritta

COGNOME Boshnakova
(per le donne indicare il cognome da nubile)

NOME Iveta

NATO A: _____
PROV. _____

IL _____

ATTUALMENTE RESIDENTE A: _____

PROV. _____

INDIRIZZO _____ **C.A.P.** _____

TELEFONO _____

Visto il D.P.R. 28 dicembre 2000, n. 445 concernente "T.U. delle disposizioni legislative e regolamentari in materia di documentazione amministrativa" e successive modifiche ed integrazioni;

Vista la Legge 12 novembre 2011, n. 183 ed in particolare l'art. 15 concernente le nuove disposizioni in materia di certificati e dichiarazioni sostitutive (*);

Consapevole che, ai sensi dell'art.76 del DPR 445/2000, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono punite ai sensi del Codice penale e delle leggi speciali vigenti in materia, dichiara sotto la propria responsabilità:

**che quanto dichiarato nel seguente curriculum vitae et studiorum
comprensivo delle informazioni sulla produzione scientifica
corrisponde a verità**

Curriculum vitae et studiorum

CNR-ICCOM Sede di Firenze
Via Madonna del Piano 10 – 50019 Sesto Fiorentino (FI)
Tel. 055 522 5280 (Direttore) – direttore@iccom.cnr.it
Tel. 055 522 5281-78-79 (Segreteria FI) – segreteria.fi@iccom.cnr.it
PARTITA IVA N. 02146410965 - CODICE FISCALE N. 00040400545



Consiglio Nazionale delle Ricerche

Istituto di Chimica dei Composti Organometallici (ICCOM)

studi compiuti, i titoli conseguiti, le pubblicazioni e/o i rapporti tecnici e/o i brevetti, i servizi prestati, le funzioni svolte, gli incarichi ricoperti ed ogni altra attività scientifica, professionale e didattica eventualmente esercitata **(in ordine cronologico iniziando dal titolo più recente)**

Es: descrizione del titolo

data protocollo

rilasciato da

periodo di attività dal al

FIRMA (**)

(*) ai sensi dell'art. 15, comma 1 della Legge 12/11/2011, n. 183 le certificazioni rilasciate dalla P.A. in ordine a stati, qualità personali e fatti sono valide e utilizzabili solo nei rapporti tra privati; nei rapporti con gli Organi della Pubblica Amministrazione e i gestori di pubblici servizi, i certificati sono sempre sostituiti dalle dichiarazioni sostitutive di certificazione o dall'atto di notorietà di cui agli artt. 46 e 47 del DPR 445/2000

N.B:

- 1) Datare e sottoscrivere tutte le pagine che compongono la dichiarazione.
 - 2) Allegare alla dichiarazione la fotocopia di un documento di identità personale, in corso di validità.
 - 3) Le informazioni fornite con la dichiarazione sostitutiva devono essere identificate correttamente con i singoli elementi di riferimento (esempio: data, protocollo, titolo pubblicazione ecc...).
 - 4) Il CNR, ai sensi dell'art. 71 e per gli effetti degli artt. 75 e 76 del D.P.R. 445 del 28/12/2000 e successive modifiche ed integrazioni, effettua il controllo sulla veridicità delle dichiarazioni sostitutive.
 - 5) La normativa sulle dichiarazioni sostitutive si applica ai cittadini italiani e dell'Unione Europea.
 - 6) I cittadini di Stati non appartenenti all'Unione, regolarmente soggiornanti in Italia, possono utilizzare le dichiarazioni sostitutive di cui agli artt. 46 e 47 del D.P.R. 445 del 28.12.2000 limitatamente agli stati, alla qualità personali e ai fatti certificabili o attestabili da parte di soggetti pubblici italiani, fatte salve le speciali disposizioni contenute nelle leggi e nei regolamenti concernenti la disciplina dell'immigrazione e la condizione dello straniero.
- Al di fuori dei casi sopradetti, i cittadini di Stati non appartenenti all'Unione autorizzati a soggiornare nel territorio dello Stato possono utilizzare le dichiarazioni sostitutive nei casi in cui la produzione delle stesse avvenga in applicazione di convenzioni internazionali fra l'Italia e il Paese di provenienza del dichiarante.

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PARTITA IVA N. 02100100900 CODICE FISCALE N. 8005400090

Curriculum Vitae

Name: Iveta Boshnakova
Address: Sofia, Bulgaria
Phone: +359 88 411 11 11
Born: 1995
E-mail: iveta.boshnakova@gmail.com
Nationality: Bulgarian



Key Qualifications:

I have Over 6 years of experience with hydrogen production via electrochemical water splitting. Synthesis of cathode and anode electrocatalysts using sol-gel, solid stated reaction, and hydrothermal synthesis methods. Extensive experience working with electrochemical methods (CV, LSV, PS) and general understanding of physicochemical methods (XRD, SEM, EDX, DTA-TGA, HRTEM) for analyzing the systems. Electrochemistry in liquid electrolytes and PEM cells. All my experience gave me the opportunity to work independently and collaboratively within groups and taught me to be detail oriented with research and analytical way of thinking.

Personal Characteristics:

I am a responsible and committed person, one who can be trusted and relied on to get results. I am a team player and social person, always ready to help my colleagues with different tasks and activities. My growth mindset enables me to constantly improve my knowledge, quickly adapt to new work environments, and handle new and challenging tasks with confidence.

Working experience:

01.2023 – present **Maternity leave**

05.2022 – 12.2022 **Internship/Researcher**

Group for Electrochemistry, Department of Chemistry University of Oslo

Working with in situ exsolution and Galvanic Replacement Reaction methods of synthesis of bimetallic catalyst supported on perovskite substrate for electrocatalyst. Physicochemical characterization of the materials using SEM and XRD methods and electrochemical investigation in alkaline media.

08.2018 – 09.2021 **Research Assistant**

Institute of Electrochemistry and Energy Systems – Bulgarian Academy of Sciences (IEES-BAS)

Synthesis and investigation of novel cost efficient, durable catalysts for hydrogen generation in low temperature PEM electrolysis cells. Investigation of mono and bi-metallic catalysts synthesized by sol-gel method. Working on 10 national and international research projects as project responsible and task responsible. Writing of scientific papers and heavily involved in the organisation of two national conferences and summer schools with international participation of more than 100 participations from over 10 different countries.

11.2015 – 04.2018 **Office administrative assistant**

IEES-BAS

Actively assisting supervisors and staff with various projects and tasks, ensuring everyone has the resources they need to succeed. Coordinating with external organizations, fostering smooth communication and collaboration. Keeping everything running

smoothly by organizing documents and paperwork and implementing a system that made information easily accessible for everyone. Managing the scheduling of meetings and conferences, keeping track of calendars, and sending out timely reminders. Maintaining a well-stocked office environment by keeping track of supplies and placing orders when necessary.

Education:

2014 – 2019

PhD in Electrochemistry

IEES-BAS, Bulgaria

Dissertation title: "Non-Carbon Catalytic Supports for Oxygen Evolution Reaction in Water Electrolysis.", Supervisor: Prof. Evelina Slavcheva, DSc

2011 – 2013

MSc in Polymer Materials

University of Chemical Technology and Metallurgy, Bulgaria

Thesis: "Development and Research of Composite Ferrite Polymer Materials."

Introducing the main characteristics and regularities of polymer synthesis and their industrial processing, the production of polymer coatings and adhesives. The specialty also concerns the new trends for the creation of construction plastics and materials, their characterization, as well as the possibilities for recycling of polymer products.

2007 – 2011

BSc in Chemical Technology

University of Chemical Technology and Metallurgy, Bulgaria

Thesis: "Investigation of The Influence of Bis (Triethoxysilylpropyl) Disulfide: Properties of Ethylene Propylene Rubber filled with Silicon Dioxide."

Publications:

- **Boshnakova**, E. Lefterova, E. Slavcheva, Investigation of montmorillonite as carrier for OER, *International Journal of Hydrogen Energy*, 43 (2018) 16897-16904. <https://doi.org/10.1016/j.ijhydene.2018.01.012>.
- **I. Boshnakova**, E. Lefterova, E. Slavcheva, Investigation of Montmorillonite as catalytic carrier for OER in Hydrogen Energy Systems, sent to *Int J Hydrogen Energy* (2017), special issue "HYCELTEC 2017".
- **I. Boshnakova**, E. Lefterova, E. Slavcheva, Montmorillonite as a catalytic support in water electrolysis, *Bulgarian Chemical Communications*, 49 Special Issue C (2017) 241 – 246.
- E. Slavcheva, G. Borisov, E. Lefterova, E. Petkucheva, **I. Boshnakova**, Ebonex supported iridium as anode catalyst for PEM water electrolysis, *International Journal of Hydrogen Energy*, 40 (2015) 11356-11361, <http://dx.doi.org/10.1016/j.ijhydene.2015.03.005>.

Utility models:

- Utility model, BG 3218 U1, 26.07.2019, Electrolysis cell for testing of MEAs -E. Slavcheva, G. Borisov, D. Paskalev, **I. Boshnakova**, E. Petkucheva, K. Maximova-Dimitrova, I. Velianov, Patent office of the Republic of Bulgaria.
- Utility model, BG 2980 U1, 16.07.2018, "Modular electrolysis cell for production of oxyhydrogen mixture" - E. Slavcheva, G. Borisov, D. Paskalev, **I. Boshnakova**, E. Petkucheva, K. Maximova - Dimitrova, Patent office of the Republic of Bulgaria.

Participation in projects:

- "Multifunctional transition metal oxides for energy storage and conversion, Bilateral project between "Egyptian Academy of Scientific Research and Technology" and "Bulgarian Academy of Sciences", 2019-2021. *Role: Project team member*
- Preparation of anode composite catalysts for low-temperature hydrogen energy converters, National Scientific Program "Young Scientists and Postdoctoral Fellows" PMS 203/19.09.18, 2019-2020. *Role: Project coordinator*
- "Modeling and investigation of degradation processes in a hybrid energy system "Photovoltaic panel - hydrogen generator" (PHOHY)" - KP-06-OPR4/3, 04.09.2018 Financing of fundamental scientific research on public challenges, NSF, 2018-2021. *Role: Project team member*
- National Scientific Program E+: Low Carbon Energy for the Transport and Households, Grant agreement D01-214/2018, Bulgarian Ministry of Education and Science (MES), 2018-2021. *Role: Project team member*
- "Innovative System for Production and Compression of Hydrogen", in partnership with Green Innovations, Bulgaria, 9IF-02-20, 04.12.2018, National Innovation Fund - Ministry of Economy, 2018-2020. *Role: Project team member*
- Development of an innovative cloud system for intelligent battery management during their operation, in partnership with Stemo Ltd. (Bulgaria), Operational Program "Innovation and Competitiveness", Bulgaria, BG16RFOP002-1.005-0108-C01 (2018 - 2020), *Role: Project administrator*
- "Composite catalysts with host structure Montmorillonite for hydrogen production-synthesis, properties and quantum chemical models", DFNP-17-150, 01.08.2017, Program for career development of young scientists, BAS/MES, 2017-2019. *Role: Project coordinator*
- "Novel Education and Training Tools based on digital applications related to Hydrogen and Fuel Cell Technology" Grant number: 736648, 5.12.2016 FP8-Horizon 2020-EU, 2017-2020. *Role: Project team member*
- "Composite catalysts for the electrochemical production of hydrogen with a host structure montmorillonite", DFNP-41/21.04.2016, Program for career development of young scientists, BAS/MES, 2016-2017. *Role: Project coordinator*
- "Integrated system for production of clean energy from waste biomass", DFNI E02/2, 22.12.2014, MES/ Bulgarian National Science Fund, 2015-2017. *Role: Project team member*
- "Bi-functional electrocatalysts for PEM hydrogen energy conversion in unitized regenerative fuel cell", Bulgarian National Science Fund, DNTK 01-005, 2012-2015. *Role: Project team member*

Participation in conferences:

- I. Boshnakova, E. Lefterova, D. Paskalev, E. Slavcheva, Montmorillonite supported tin/iridium as anode catalyst for PEM water electrolysis, **Sofia Electrochemical Days'2019**, 16-19 October 2019, Sofia, Bulgaria. (*Oral presentation*)

- I. Boshnakova, E. Lefterova, D. Paskalev, E. Slavcheva, Comparative study on different non-carbon catalytic supports for OER in PEM water electrolysis, **Sofia Electrochemical Days'2019**, 16-19 October 2019, Sofia, Bulgaria. (*Poster presentation*)
- I. Boshnakova, E. Lefterova, D. Paskalev, E. Slavcheva, Non-carbon supported Ir-based catalyst for OER in PEMWE, **Eight International Conference of FMNS (FMNS-2019)**, 26-28 June 2019, Blagoevgrad, Bulgaria. (*Oral presentation*)
- I. Boshnakova, E. Lefterova, D. Paskalev, E. Slavcheva, Investigation of Ir deposited on different non-carbon supports as catalyst for OER in PEMEC, **7th Regional Symposium on Electrochemistry South-East Europe**, 27-30 May 2019, Split, Croatia. (*Oral presentation*)
- I. Boshnakova, D. Paskalev, E. Lefterova, E. Slavcheva, Bi-metallic Ir-Sn catalysts with non-carbon catalytic support- Montmorillonite as oxide electrocatalysts for PEMWEs, **Vth International Conference on Oxide and Non-oxide Materials for Optoelectronics and Energy Applications**, 20-23 March 2019, Borovetz Bulgaria. (*Flash-poster presentation*)
- I. Boshnakova, D. Paskalev, E. Lefterova, E. Slavcheva, Composite ternary IrSn/MMT oxide electrocatalysts for PEMWEs, **20th International Workshop on Nanoscience and Nanotechnology**- 21-22 November 2019, Sofia, Bulgaria. (*Oral presentation*)
- I. Boshnakova, G. Borisov, E. Lefterova, Evelina Slavcheva, Montmorillonite-supported OER catalysts for hydrogen production via PEM water electrolysis, **22nd World Hydrogen Energy Conference (WHEC)**, 17-22 June 2018, Rio de Janeiro, Brazil. (*Poster presentation*)
- I. Boshnakova, E. Lefterova, E. Slavcheva, Investigation of Montmorillonite as carrier for PEM water electrolysis OER catalysts, **VI Symposium on Hydrogen, Fuel Cells and Advanced Batteries (HYCELTEC'17)**, 19-23 June 2017, Porto, Portugal. (*Oral presentation*)
- I. Boshnakova, G. Borisov, E. Lefterova, Evelina Slavcheva, PEMECs with Ir/MMT as anode material, **6th Regional Symposium on Electrochemistry South-East Europe**, 11-15 June 2017, Balatonkenese, Hungary. (*Oral presentation*)
- I. Boshnakova, E. Lefterova, E. Slavcheva, Montmorillonite as a catalytic support for OER in Hydrogen Energy Systems, **XXIV Congress of Chemists and Technologists of Macedonia**, 11-14 September 2016, Ohrid, Macedonia. (*Oral presentation*)
- I. Boshnakova, E. Lefterova, E. Slavcheva, Montmorillonite - Supported Composite Catalysts for Water Electrolysis Cells, **67th Annual Meeting of the International Society of Electrochemistry**, 21-26 August 2016, The Hague, The Netherlands. (*Poster presentation*)
- I. Boshnakova, E. Lefterova, E. Slavcheva, Montmorillonite as a catalytic support in Hydrogen Energy Systems, **25 Jahre Deutschsprachiger Studiengang "Chemische Verfahrenstechnik" - für eine saubere Welt**, 26-27 April 2016, UCTM-Sofiq, Bulgaria. (*Oral presentation*)
- I. Boshnakova, E. Lefterova, E. Slavcheva, Advanced non-carbon materials as catalytic supports for PEMWE, **17th International Workshop on Nanoscience and nanotechnology**, 27-28 November 2015, Sofia, Bulgaria. (*Oral presentation*)

- I. Boshnakova, P. Ublekov, E. Slavcheva, Novel Cost Efficient Corrosion Resistant Catalytic Carrier for PEMWE Applications, **5th Regional Symposium on Electrochemistry South-East Europe**, 7-10 June 2015, Pravets, Bulgaria. (*Poster presentation*)
- I. Boshnakova, E. Petkucheva, E. Lefterova, E. Slavcheva, Comparative study on different Magnelli-phase titania trade-marks as catalyst supports for electrolytic hydrogen generation, **6th International Conference on Hydrogen Technologies**, 18-20 March 2015, Prague, Czech Republic. (*Poster presentation*)
- I. Boshnakova, E. Petkucheva, E. Lefterova, E. Slavcheva, Effect of Magnelli-phase titania benchmark on the efficiency of supported Ir as anode for electrolytic hydrogen generation, **"16th International Workshop on Nanoscience and Nanotechnology"**, 7-8 November 2014, Sofia, Bulgaria. (*Poster presentation*)

Accomplishments:

11.2019	"The Best Project" in Research Division "Energy Resources and Energy Efficiency" of Bulgarian Academy of Sciences, Honors for successful implementation of projects under the "Program for Supporting Young Scientist".
10.2019	"Best poster presentation" - Sofia Electrochemical Days'2019 , 16-19 October 2019, Sofia, Bulgaria.
05.2019	Power Up by InnoEnergy - "The biggest competition for energy start-ups in Central Eastern European countries", Second place at Country final in Bulgaria.
02.2019	"Best Publication" Bulgarian Academy of Sciences, Second prize in Direction 2: "Energy resources and energy efficiency"
06.2017	Hyceltec 2017 Accommodation Grants - presenting PhD students up to the age of 30 HYCELTEC 2017, Porto, Portugal
01.2017	Competition for Young scientists "Acad. E. Budevski" Institute of Electrochemistry and Energy Systems, First prize for scientists without PhD degree.

Courses/further education:

05.2019	Power Up by InnoEnergy (1 week)
05.2018	"Hydrogen - An innovative energy carrier, its applications and future perspectives" lecture course delivered by Prof. Olaf Jedicke (4 days)
06.2016	IncoNet EAP Summer School "Energy Efficiency". International Project Management – from Theory to Practice". (1 week)

Driving licenses: B

Computer skills: Microsoft Office, Origin, LabView, Gamry

Languages: English – very well oral and written level
Norwegian – very well oral and written level (Currently Learning)

Other: Member of Organizing Committee:

- "Sofia Electrochemical Days" 2019, National scientific conference with international participation
- "NET-Tools 1st Educational Summer School 2019"
- "Sofia Electrochemical Days" 2017

Membership in "International Society of Electrochemistry"

References:

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