

## Proposal of the Croatian Microscopy Society for awarding the "Spiridion Brusina" Medal to Professor Miran Čeh, PhD, Jožef Stefan Institute, Ljubljana, Slovenia

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## CONTRIBUTION OF PROFESSOR MIRAN ČEH TO CROATIAN MICROSCOPY

Ooperation with Professor Miran Čeh started back in 2007, when a member of the Croatian Microscopy Society (CMS), Andreja Gajović, joined the group of Prof. Miran Čeh for post-doctoral training to Jožef Stefan Institute. Since then, Prof. Čeh collaborated extensively with Croatian scientists through a number of bilateral projects, and in this way participated and still participates in the education of Croatian scientists on high resolution transmission electron microscopy (HR-TEM). Moreover, Milivoj Plodinec, a member of CMS, spent a sixmonth TEM training (2011/2012) at the Department for Nanostructured Materials, Jožef Stefan Institute, Ljubljana, Slovenia (Croatian Science Foundation's scholarship for doctoral students, project title "Titanate nanostructures - synthesis and high-resolution transmission electron microscopy (TinaTEM)"). Training was performed under the mentorship of Prof. Čeh in the field of synthesis of nanomaterials and their characterization, using, primarily, basic, and advanced techniques of electron microscopy. Plodinec gathered significant knowledge in scanning electron microscopy (SEM), transmission electron microscopy (TEM), high-resolution transmission electron microscopy (HRTEM), selected area electron diffraction (SAED) and energy dispersive X-ray spectroscopy (EDS) and respected techniques. He transferred the acquired knowledge to the Ruđer Bošković Institute, where he was working on the functionalization of Ti0, nanostructures for various applications.

Prof. Miran Čeh has been a member of CMS for many years and participated in a number of annual meetings, where he held lectures on the application of TEM techniques. In this way he encouraged and educated young scientists in Croatia to apply TEM techniques in their scientific work. He also supports the work of the Society by participating in Croatian Microscopy Congresses and Symposia, holding invited and plenary lectures as follows:

1. "HAADF-STEM investigations of layered structures", plenary lecture; Croatian microscopy symposium, November 16-17, 2011.

2. "Qualitative and quantitative interpretation of atomic-resolution HAADF-STEM images", plenary lecture; 2<sup>nd</sup> Croatian microscopy

congress with international participation, Topusko, 18–21 May, 2006.

3. "High-resolution STEM Investigations of SrOdoped Sr(Ti,Nb)03 and In203- thermoelectrics", invited lecture; 3<sup>rd</sup> Croatian microscopy congress with international participation, Zadar, 26-29 April, 2015.

In addition, Prof. Čeh inspired the former president of the CMS, Andreja Gajović, to join the Slovenian Society for Microscopy, thus expanding cooperation and encouraging the acquaintance and collaboration of Croatian and Slovenian microscopists. Prof. Čeh often assists the scientific board of Croatian microscopy congresses by suggesting and inviting leading international scientist in field of microscopy and encouraging their participation in Croatian meetings. Prof. Miran Čeh even offered to donate an instrument - FEG TEM JEOL2010 – to the Ruđer Bošković Institute, but this generous offer, unfortunately, had to be declined due to the risk of possible malfunctions during instrument reinstallation, especially since extensive infrastructural and construction work is starting at RBI in the next period.

Based on the above, the Croatian Microscopy Society proposed that the "Spridion Brusina" medal be awarded to Prof. Miran Čeh, a foreign scientist who greatly contributed and still contributes to the development of microscopy and microscopic techniques in Croatia, thereby encouraging the development of science in Croatia in general.