

TMS Members Honored by CIM



Phillip J. Mackey



William Petruk



Mahesh C. Chaturvedi



Michael Sudbury

Congratulations to four TMS members who were honored by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) at the CIM Conference and Exhibition in May.

One of CIM's most prestigious awards, the Selwyn G. Blaylock Medal, was presented to Phillip J. Mackey, president of P.J. Mackey Technology, Inc. in Montreal. A TMS member since 1966, Mackey received the award for "contributions in extractive metallurgy and for mentoring several generations of engineers." The Blaylock Medal was established in 1948 and is awarded annually by CIM to an individual who has demonstrated distinguished service to Canada through exceptional achievement in the field of mining, metallurgy, or geology.

Mahesh C. Chaturvedi, a professor at the University of Manitoba, Winnipeg, and TMS member since 1993, was

named a CIM Distinguished Lecturer for "his pioneering work in superalloys and grain-boundary engineering, yielding breakthroughs in superalloy welding and having a profound effect on the aerospace industry." His lecture is titled, "The Role of Boron in Design Superalloys." CIM Distinguished Lecturers are chosen on the basis of their accomplishments in scientific, technical, management or educational activities related to the minerals industry, and speak at CIM Branch meetings across Canada.

Finally, William Petruk, a TMS member since 1981 from Ottawa, Ontario, and Michael Sudbury, a TMS member since 1961 from Oakville, Ontario, were both inducted into the CIM Fifty Year Club. CIM members with a membership of fifty years can be elected to the club as a mark of distinction.

Moody Named MRS Fellow

Neville Moody, distinguished member of the technical staff, Sandia National Laboratories, and TMS member since 1980, has been named a Fellow in the Materials Research Society (MRS). He was honored "for outstanding research characterizing the deformation and fracture of materials, for service shaping the quality of professional society activities, and for mentoring generations of students, professors, and researchers."



Moody earned his Ph.D. in materials science from the University of Minnesota in 1981, joining Sandia that same year. He has given more than 100 invited presentations and authored or co-authored more than 170 publications, including invited reviews and a chapter in *Comprehensive Structural Integrity*. He is also on the board of review for *Metallurgical and Materials Transactions*, an active member of several TMS committees, and has organized numerous TMS symposia on hydrogen effects, fracture of titanium alloys, and nanomechanical behavior of materials.

Advanced Materials for Our Energy Future Goes to School



Iver Anderson (center), senior metallurgist at Ames Laboratory and chair of the TMS Materials and Society Committee, recently spoke to the Advanced Placement Physics class at Ames High School, Iowa, on potential careers. As a teaching tool, he used *Advanced Materials for Our Energy Future*, a publication recently released as a collaborative initiative of TMS, the American Ceramic Society (ACerS), the Association for Iron & Steel Technology (AIST), ASM International (ASM), and the Materials Research Society (MRS). Anderson said he distributed the document to "explain about the challenges that the students could tackle as fresh material scientists/engineers." The students are shown holding the publication.



TMS Member Profiles

Dmitri Nassyrov's Noteworthy Achievements with the Balalaika

By Lynne Robinson

Sweet and wistful, the strains of the balalaika in Dmitri Nassyrov's hands tell tales of snowy evenings and lost love in the Russian countryside. This is what most people have come to expect from this traditional folk instrument, Nassyrov notes, which is why he delights in "showing the possibilities of the balalaika" to his audiences. His fingers flying over the frets, his left hand a blur across the strings, Nassyrov performs anything from a sassy, jazz-tinged number by George Gershwin, to a driving Astor Piazzolla tango, to the delicate "Vocalise" by Sergei Rachmaninoff.

When his listeners express amazement at the versatility of the triangular, three-stringed instrument, Nassyrov says he likes to quote the innovative banjo player, Béla Fleck, who once observed, "All jazz players play the same notes. I just have to find these notes on my banjo."

A rising senior in materials engineering at McGill University in Montréal and a 2010 TMS Light Metals Division

Scholarship winner, Nassyrov began playing the balalaika as a first grader in his native Russia as part of a school music program. "On the first day of classes, our music teacher gave all the girls a domra (an instrument similar to the balalaika with a round body) and all the boys got a balalaika," he recalled. "I wasn't given much of a choice."

Although his introduction to the instrument was somewhat arbitrary, Nassyrov found that he really enjoyed playing and took formal balalaika lessons until his family moved to Montréal. Unlike in Russia, where the balalaika is widely beloved, Nassyrov discovered that "balalaika players were nowhere to be found" in Canada and was compelled to work on his own to improve his skills and technique. His efforts did not go unnoticed. "Russian concert organizers somehow quickly found out that there was a 'cute little boy playing the balalaika who absolutely has to perform in that upcoming festival,'" said Nassyrov.

As Nassyrov became more in de-

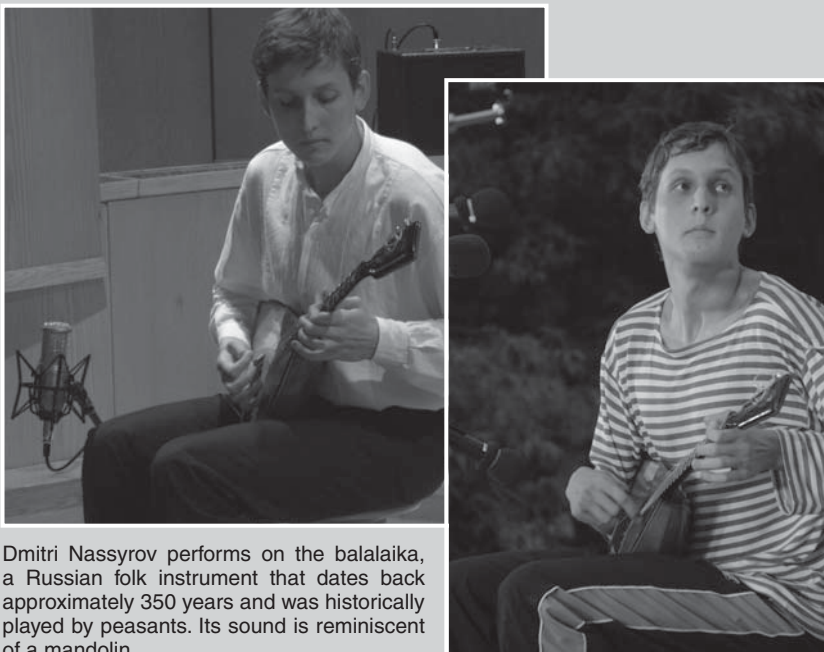
mand on the festival circuit, his parents approached Victoria Khramova, an accomplished pianist, to play accompaniment for their son's performances. Nassyrov said he had mastered only a very few traditional selections until 2005, when he and Khramova decided to formally establish a balalaika-piano duo. The two started practicing together regularly and eventually built up their current eclectic repertoire for solo concerts. They now perform throughout Montréal and Québec province in small concert halls, community centers, churches, schools, and cafés. For a change of pace, Nassyrov occasionally plays balalaika in a friend's rock band.

Nassyrov doesn't mind juggling the demands of his coursework with his performance schedule, saying, "People, in general, know very little about this instrument and I really enjoy sharing it with them." He is currently exploring a number of materials science interests in school, and has already held two research positions in alloy design through computational thermodynamics and completed an internship in pyrometallurgical processing. This summer, he is working on polymer photovoltaics and will be focusing on hydrometallurgical processing in the fall. Although he's still considering his options after graduation, Nassyrov said that the balalaika will always be part of his life, "even if it's at a pace slower than today."

He remarks, "I am thankful that I turned out to be one of the few who had the chance to be taught to play this instrument."

To hear a balalaika performance by Nassyrov, go to www.stringsandkeys.com/eng/audio.html.

Each month, *JOM* profiles a TMS member and his or her activities both in and out of the realm of materials science and engineering. To suggest a candidate for this feature, contact Maureen Byko, *JOM* editor, at mbyko@tms.org.



Dmitri Nassyrov performs on the balalaika, a Russian folk instrument that dates back approximately 350 years and was historically played by peasants. Its sound is reminiscent of a mandolin.