



הוועדה לאנרגיה אטומית  
ATOMIC ENERGY COMMISSION

NUCLEAR RESEARCH CENTER NEGEV  
POB 9001 BEER-SHEVA ISRAEL

הקרייה למחקר גרעיני - נגב  
ת.ד. 9001 באר-שבע

Aug. 05th 2019

To:  
Pierre Gavoille

Pierre.gavoille@cea.fr

Dear Dr. Gavoille

On behalf of the Professional Staff Promotion Committee at NRCN, I would greatly appreciate receiving your advice and assistance in the following matter. **Mr. Ziv Ungarish** is currently under consideration for promotion to "B" Research Grade at NRCN. The candidate's Curriculum Vitae and list of publications are enclosed.

Evaluations from scholars outside our institution are an essential component of a candidate's dossier. We would therefore welcome your detailed opinion on the quality of **Mr. Ziv Ungarish** research, its depth, originality and the degree to which it represents a contribution to the field.

It may help if, in making your evaluation, you would take into account the structure of ranks at NRCN: C, B, A and A+, that are roughly equivalent to Lecturer, Senior Lecturer, Associate Professor and Full Professor at Israeli universities. We would also like to emphasize that some of the research and development work at NRCN is proprietary. We would therefore appreciate if you could base your evaluation on the quality of the candidate's work and not on its overall quantity.

If you happen to know the candidate personally, we would be grateful for your opinion on his character, cooperation with colleagues and administrative abilities.

We realize that providing the evaluation would entail investment of your precious time and effort, but hope that we can impose on you for assistance in this matter. We would appreciate receiving your response by Sept. 05th 2019 if possible. Your letter will become part of **Mr. Ziv Ungarish** file and will be held in the strictest confidence.

Yours Sincerely,

Dr. Ohad Levy  
Chair, Professional Staff Promotion Committee

## CURRICULUM VITAE

### Personal

**Civil State:** Born in Haifa, Israel on 12/12/1983 ; Single.

**2001:** Graduated High School

**2005-2011:** Israel Defense Forces.

### Education

**2015:** Ben Gurion University of the Negev, Beer-Sheva, Israel. Graduate Studies. Graduated with distinction cum laude.

Thesis: "A study of cladding magnesium by aluminum using coextrusion to understand nuclear fuel cladding by this method"

Advised by Dr. Nissim Navi and Prof. Moshe Mintz.

Department of Nuclear Engineering, Ben Gurion University of the Negev.

**2005:** Ben Gurion University of the Negev, Beer-Sheva, Israel. Undergraduate Studies.

Thesis: "Hydrogen embrittlement of titanium alloy  $\beta$ -21s"

Advised by Prof. Dan Eliezer

Department of Materials Science and Engineering, Ben Gurion University of the Negev.

### Employment

**Since 2017:** Researcher and project leader at the materials department, Nuclear Research Center – Negev

**2016:** Visiting Scientist at the LECI laboratories, CEA-Saclay, France.

**2013-2016:** Researcher at the materials department, Nuclear Research Center –Negev.

**2012-2013:** R&D engineer at Rotem Industries Ltd.

**2005-2012:** R&D engineer at the materials department, Rafael Advanced Defense Systems.

## **Publications**

### **Peer Reviewed Journals**

E. Priel, Z. Ungarish, N.U. Navi, "**Co-extrusion of a Mg-Al Combined Billet: A Computational Study Validated by Experiments**", Journal of Materials Processing Technology, Volume 203, 103-113 (2016)

### **International Collaboration**

Z. Ungarish, B. Kapusta, P. Gavaille, "**High Dose Si Ion Irradiations of Aluminum Alloys: Microstructural and Mechanical Properties**", NRCN Report No. N-18/002 (2018).

### **Conferences**

Z. Ungarish, B. Kapusta, P. Gavaille, "**Effects of Silicon Ion Irradiation on Aluminum Alloys**", IMEC18, Dead Sea, Israel (2018)

M. Tubul, Z. Ungarish, S. Amar, I. Safar, E. Tiferet, E. Kochavi, "**Determination of Aluminum Mechanical Properties Using Small Punch Test and Advanced Numerical Methods**", IMEC18, Dead Sea, Israel (2018)

E. Priel, Z. Ungarish, N.U. Navi, "**Co-extrusion of a Mg/Al Composite Billet: A Computational Study Validated By Experiments**", COMPLAS 2017, Barcelona, Spain (2017)

Z. Ungarish, B. Kapusta, P. Gavaille, "**Study of Neutron and Ion Irradiation Damage in Aluminum Alloys**", TMS2017, San Diego, California, USA (2017)

M. Tubul, S. Amar, I. Safar, Z. Ungarish, E. Tiferet, E. Kochavi, "**Mechanical Properties of Miniature Samples of Additive Manufactured Aluminum: An Experimental and Computational Study**", TMS2017, San Diego, California, USA (2017)

Z. Ungarish, E. Priel, M. Mintz, N. Navi, "**Co-extrusion of an Aluminum- Magnesium Composite Billet: Investigation of Material Flow and Interface Interaction**", 33rd Israeli Conference of Mechanical Engineering (ICME), Tel Aviv, Israel (2015)

Z. Ungarish, E. Priel, M. Mintz, N. Navi, "**Trends in Aluminum Cladded Magnesium by Extrusion**", IMEC16, Haifa, Israel (2014)

E. Priel, Z. Ungarish, M. Mintz, N. Navi, "**Extrusion Cladding of Magnesium by Aluminum: A Computational Study Validated by Experiments**", 37th Israeli Symposium on Computational Mechanics (ISCM), Tel Aviv, Israel (2014)

E. Priel, Z. Ungarish, N. Navi, "**Co-extrusion of a Magnesium/Aluminum Composite Billet: A Computational Study Validated by Experiments**", Abaqus User's Meeting, Ramat Gan, Israel (2014)

Z. Ungarish, R. Padan, Y. Khoptiar, J. Flomenblit, I. Gutman, D. Gorni, "**Effect of Pre-Stressing on Transformation Temperature (Af) of NiTi Alloys**", IMEC15, Dead Sea, Israel (2012)

R. Padan, Z. Ungarish, Y. Khoptiar, I. Gutman, D. Gorni, "**Shape Memory Alloy Based Actuators: Potential vs. Limitations**", ICME 2010, Tel Aviv, Israel (2010)

Z. Ungarish, R. Padan, Y. Khoptiar, J. Flomenblit, I. Gutman, D. Gorni, "**Effect of Special Thermal Treatments in Super-elastic Behavior in Ni-rich Nitinol Alloy**", SMST 2010, Pacific Grove, California, USA (2010)

R. Padan, Z. Ungarish, Y. Khoptiar, I. Gutman, D. Gorni, "**Super-elastic and Shape Memory Effect Applications in Nitinol Based Actuators**", IMEC14, Tel Aviv, Israel (2009)

E. Faran, R. Padan, Z. Ungarish, Y. Ben Shmuel, F. Keidar, D. Gorni, "**Super-elastic Nitinol Torsion Spring**", IMEC13, Haifa, Israel (2007)