

The outstanding challenge in solid mechanics: engineering structures subjected to extreme loading conditions



2nd Industrial Workshop – Tuesday – 6th of February

The meeting will be held at the Technion Campus, in Haifa (Israel) <https://www.technion.ac.il/en/> (room 217 Dan Kahn building). From Haifa downtown, the cheapest and fastest way to reach Technion is by Taxi. Approximate prize: 50-60 Israeli shekels from the hotel/s in which we will stay. The workshop will include a visit to Rafael's main plant, located 30 minutes from the Technion.

Agenda

08:30 - 09:00 Morning meeting and coffee

09:00 - 09:15 Welcome - Jose, Dany, Shmulik, Zev

09:15 - 09:40

Z. Rozenberg - Deep indentation as a method for obtaining ballistic resistance

09:40 - 10:05

E. Avriel - Measuring strength at high strain rates using EM driven expanding cylinders

10:05 - 10:30

O. Shor – Numerical Simulation of Damage Propagation in Composite Aerospace Structures – Challenges and Practical Examples

10:45 - 11:45 Drive to RAFAEL and Entrance

11:45- 13:45 Visit to RAFAEL

13:45 -14:15 Drive back to Technion - for Lunch

14:15 - 15:15 LUNCH

15:20 - 15:45

Roman Kositski – Shock deformation in BCC metals – relating dislocation fields to stresses in MD simulations

15:45 - 16:10

R. Michaelis - Light Weight Armor – Challenges in Testing and Modeling of ceramics

16:10 - 16:30 - COFFEE BREAK

16:30 - 16:55

S. Tzibula – Measuring dynamic tensile strength of ductile polymers

16:55 - 17:20

Yair Luxenburg – The scaling phenomena of concrete targets perforated by rigid projectiles.

17:20 – 17:30 Summary – Zev/Jose

At 17.45 a bus will drive us to have dinner in the restaurant to *Quando Pasha* to have dinner (https://www.tripadvisor.es/Restaurant_Review-g293982-d9746624-Reviews-Quando_Pasha-Haifa_Haifa_District.html)

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Participants

Beneficiary	Participant
University Carlos III of Madrid	José A. Rodríguez-Martínez – Project Coordinator Álvaro Vaz-Romero – Project Manager Guadalupe Vadillo – Work Package Leader 1 Komi Espoir N'souglo - ESR Manjunath Dakshinamurthy - ESR
University of Lorraine	Sébastien Mercier Cristian Dascalu Christophe Czarnota Marion Martiny – Work Package Leader 3 Manoj Subramani - ESR Kokouvi Gbetchi - ESR
Technion	Daniel Rittel – Work Package Leader 2 Shmuel Osovski Juan Carlos Nieto Fuentes - ESR Irfan Hebeeb - ESR
Aerosertec	Raúl Herrero Eduardo Cano José Luis Vega Stylianios Tsopanidis - ESR
Cimulec	François Lechleiter Essossinam Simlissi - ESR
Partner organization	Participant
RAFAEL	Zev Lovinger

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Mid-term Meeting – Wednesday – 7th of February

The meeting will be held at the Technion Campus, in Haifa (Israel) <https://www.technion.ac.il/en/> (room 316 Dan Kahn building). From Haifa downtown, the cheapest and fastest way to reach Technion is by Taxi. Approximate prize: 50-60 Israeli shekels from the hotel/s in which we will stay.

Agenda

8:15-8:30 Welcome: D. Rittel and S. Osovski (Local organizers)

8:30-8:45 Introduction: M. Vili (REA project officer) and J. A. Rodríguez-Martínez (Coordinator)

Short introduction by the REA Project Officer and the Project Coordinator (~15 minutes)

8:45-9:15 Tour de Table: G. Vadillo (Leader WP1), D. Rittel (Leader WP2) and M. Martiny (Leader WP3)

The WP leaders will briefly present their research team and describe their role within the network

9:15-10:15 Coordinator's report: J. A. Rodríguez-Martínez (Coordinator)

Presentation of the Network and the Mid-term report covering scientific, training, networking and management aspects of the project

10:15-10:30 Coffee break

10:30-12:30 Fellows' individual reports: M. Daskhinamurthy (ESR1), M. Subramani (ESR2), I. Habeeb (ESR3), E. K. N'souglo (ESR4), K. Gbetchi (ESR5), J. C. Nieto (ESR6), S. Tsopanidis (ESR7), E. Simlissi (ESR8)

Every ESR will present his/her individual research project and the results or achievements so far

WP1 Presentation ESR1: **M. Daskhinamurthy** (presentation 10 min + questions 5 min)
Presentation ESR2: **M. Subramani** (presentation 10 min + questions 5 min)
Presentation ESR3: **I. Habeeb** (presentation 10 min + questions 5 min)

WP2 Presentation ESR4: **E. K. N'souglo** (presentation 10 min + questions 5 min)
Presentation ESR5: **K. Gbetchi** (presentation 10 min + questions 5 min)
Presentation ESR6: **J. C. Nieto** (presentation 10 min + questions 5 min)

WP3 Presentation ESR7: **S. Tsopanidis** (presentation 10 min + questions 5 min)
Presentation ESR8: **E. Simlissi** (presentation 10 min + questions 5 min)

12:30-14:15 Lunch

14:15-16:00 Meeting between the ESRs and the REA project officer

Discussion of the ESRs with the REA Project Officer about their experiences within the Network in terms of training, progress and impact on their future careers.

16:00-16:15 Coffee break

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16:15-16:45 **Restricted session**

Meeting between coordinator, project manager and members of the supervisory board with the REA Project Officer to discuss financial issues and periodic report

16:45-17:30 **Feedback and open discussion**

Feedback from the REA Project Officer and discussion on the output of the Network so far, on possible training areas for future exploitation or the impact on fellows' future careers development

17:30-17:45 Closure: D. Rittel (Local organizer), S. Osovski (Local organizer) and J. A. Rodríguez-Martínez (Coordinator)

Free evening

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Cimulec	François Lechleiter Essossinam Simlissi - ESR
Partner organization	Participant
RAFAEL	Zev Lovinger
Institution	Participant
Research Executive Agency	Maria Vili (Project Officer)