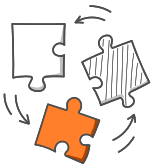


Newsletter

New strategies for multifield fracture problems across scales in heterogeneous systems for Energy, Health and Transport

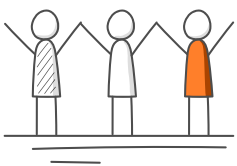
 **NewFrac** 
Training Network



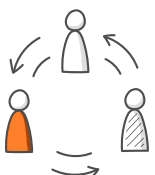
NewFrac is the first coordinated initiative in EU aiming at the systematic progress in the failure prediction in heterogeneous systems through a novel computational framework by integrating Finite Fracture Mechanics and Phase Field modelling strategies.



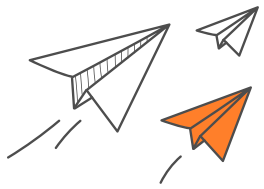
The potential impact of this modelling and simulation framework in the design of heterogeneous materials and structures can be enormous, for instance, in a weight reduction of about 10% with respect to the current design concepts, increasing the ratios of strength/weight and stiffness/weight.



A high-level training of a new generation of creative, entrepreneurial, and innovative early-stage researchers (ESRs) through the development and engineering applications of a new modeling framework focused on the prediction and analysis of multi-field fracture phenomena in heterogeneous engineering systems at different scales.



Training of a new generation of creative, entrepreneurial & innovative researchers in structural-failure prediction. The NewFrac Network is a 36-month PhD program, where students will have intersectoral and international training around Europe in top of the line laboratories and companies in the field.



From Coordination Team

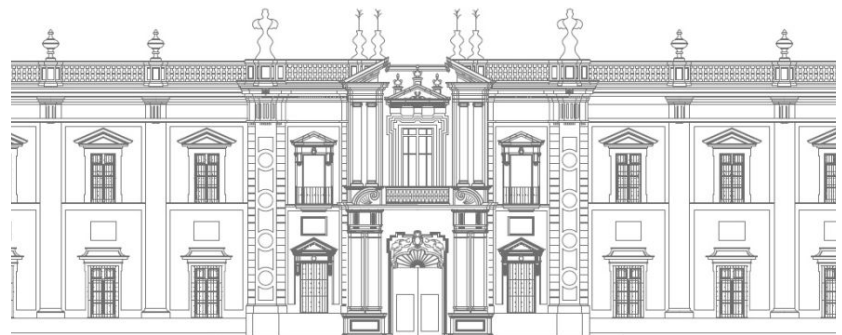
By Universidad de Sevilla Team

Dear friends,

This is the first newsletter of the NewFrac Training Network, which we are honoured to serve. We are extremely glad to have the possibility to serve on the project and we are very lucky to be so well supported in doing this by a large number of outstanding, professional people. The newsletters, which will be distributed every six months contains the main important news of the project, main scientific advances, announcements and programs of the events and workshops & other material of interest to the NewFrac.

This first newsletter contains news from the just-started establishment of the project, whereas, starting from the next newsletter, it will contain material contributed and submitted by project's members and interested people.

Finally, we would like to thank you for your collaboration and contributions in the future.



Our Team & Consortium

7 leading research groups & 2+3 leading high-tech companies



Politecnico di Torino



BOSCH
Invented for life

ETH zürich

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement Nr. 861061





Early-Stage Researchers

Training students for solving the problems of the future

One of the principals expected outcomes of the NewFrac network is the training of **13 Early-Stage Researchers (ESRs)** who will be trained to conduct a breakthrough research in fracture modelling engaging interdisciplinary academic and industrial activities and will become expert researchers.

NewFrac in its mission of training students capable of solving the current problems of multi-field fracture phenomena in heterogeneous engineering systems, offers 13 PhD positions for early stage researchers (ESRs) distributed in a network of 5 European countries (France, Germany, Italy, Portugal and Spain) and 2 countries associated (Israel and Switzerland), with the participation of prestigious academic and industrial institutions that will allow researchers to grow and develop their technical skills in a multisectoral environment.

This first 6-month period covers the recruitment timeline for the ESRs positions. Around 1.300 application forms were received, and 12 selection procedures have been finalized and position ESR-06 at Robert Bosch has been reopened.

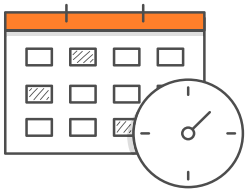


New PhD Positions

More info at: www.newfrac.eu/phd-positions

Robert Bosch is looking for an excellent candidate for his PhD position ESR-6: “Multiscale modeling of fracture processes in injection molded SFRPs”. Offer has been published in Euraxess (offer ID: 572885), candidates can apply on the NewFrac website, www.newfrac.eu. Application Form will be open till November 30th 18.00h. More info at: www.newfrac.eu/phd-positions/esr6df





Main Events

From month 7 to 42 of the project, monthly Webinar NewFrac seminars where advances, achieved solutions and open problems a difficulty of ESRs will be addressed.

UPCOMING EVENTS:

- Extended webinar session November 2020
 - Nov 11th, Composite
 - Nov 17th, Energy
 - Nov 18th, Fundamentals
 - Nov 19th, Biomechanics
- Monthly webinars

RESCHEDULED EVENTS:

Due to Covid situation, it has been internally discussed in the consortium that CORE Winter School and 1st Workshop scheduled in January 2021 in Seville, should be reinvented and or rescheduled. These decisions will be made during November 2020 in order to be prepared on time for these events.

NOV-2020

DEC-2020

JAN-2021

November
WEBINAR



December
WEBINAR



1st WORKSHOP
CORE Winter School



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