

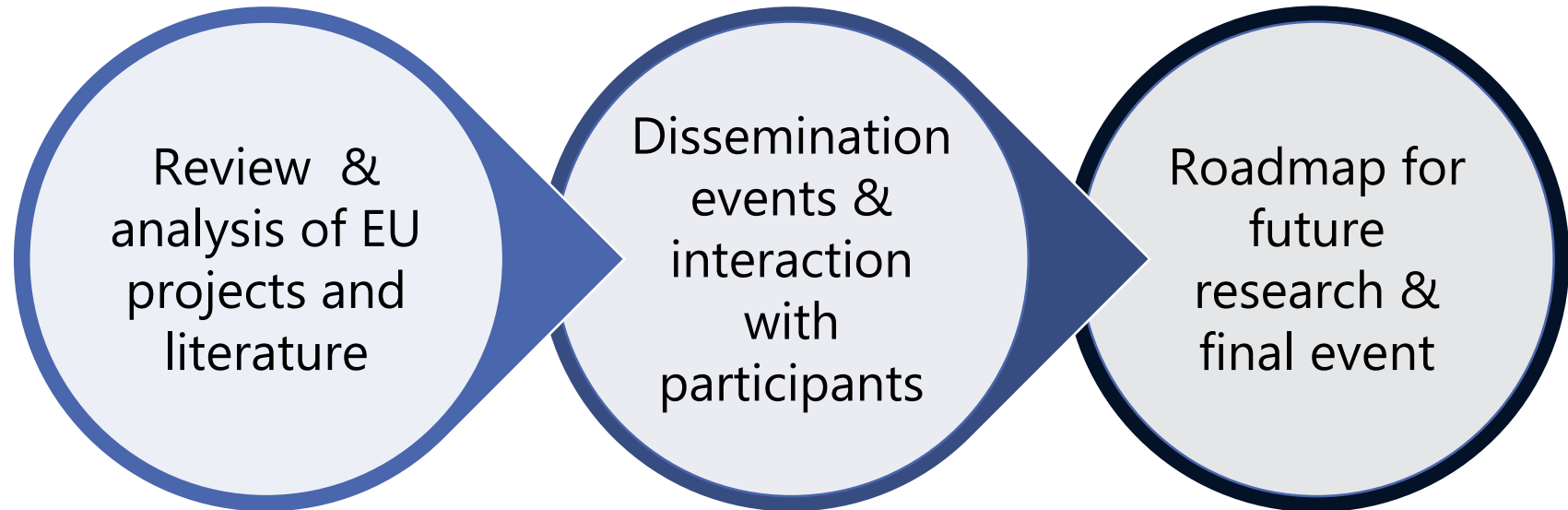


# Cracks in continuous casting: highlights of 25 years of RFCS research

*Introduction to Valcra project & webinar*



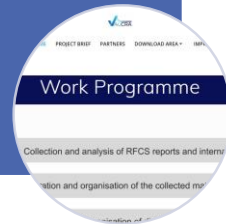
**VALorisation and dissemination of RFCS projects results and experience in steel surface quality issues: on as-cast CRACKs formation**



## Media

- [www.valcra.eu](http://www.valcra.eu)
- Project information
- Event list/registration
- Download of deliverables
- Download of presentations

Valcra Website



- <https://www.linkedin.com/company/31417305>
- Get updated information on VALCRA events and deliverables

ECCN – European continuous casting Network on LinkedIn



- <https://www.linkedin.com/groups/13794289/>
- Participate to discussions on a technical scientific argument
- **Get answers asked in webinars**

Valcra discussion Group on LinkedIn



## Deliverables D2.1, D2.2, D2.3

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### D2.1

### Complete list of relevant reports and papers

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- Classification of projects and literature to identify the main topics covered by EU funded research
- Spreadsheet list of **32 projects**
- Spreadsheet list of **60 papers**

### D2.2

### List of topics

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- Analysis by argument of the collected reports and literature

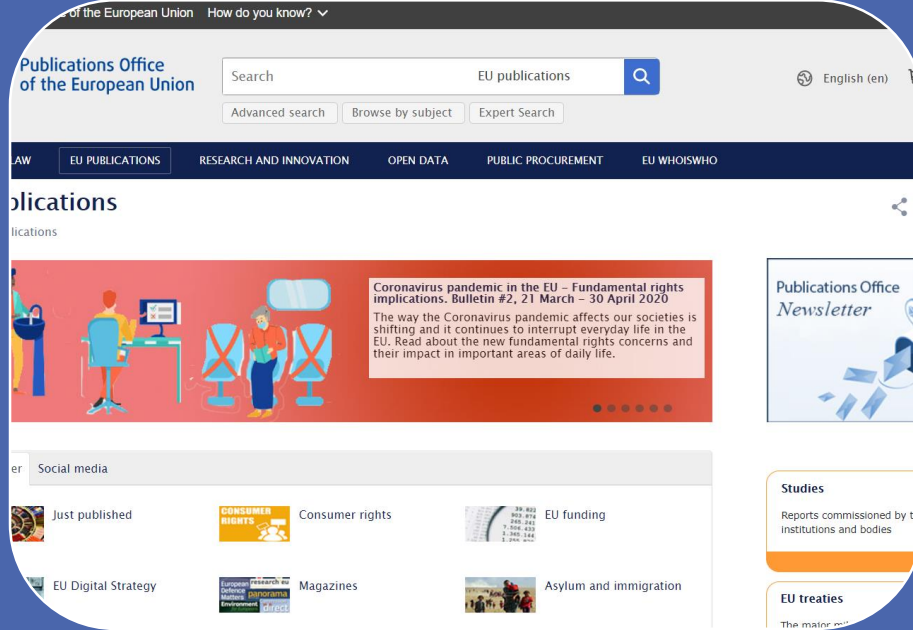
### D2.3

### Classification and ranking of projects

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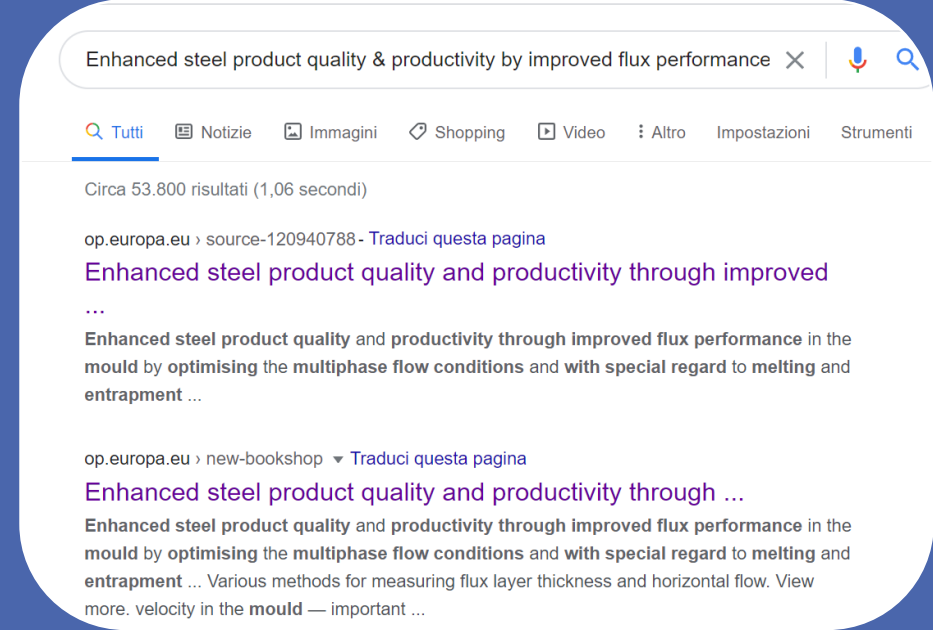
- Assessment of the RFCS projects
  - Success of project
  - Industrial/economic impact
  - TRL evolution

## Deliverable D2.1: how to get the ECSC/RFCS final reports



From EU Bookshop:  
<https://op.europa.eu/en/web/general-publications/publications>

Search full project title



Google full project title

Leads to EU Bookshop

Download pdf is free - Reports are available in most cases

## Deliverable D3.1

### D3.1

### State of the Art for each Research Topic

#### TOPICS:

- Basic Knowledge
- Modelling
- Process Optimization
- Mould powders
- Process control & sensing

#### STRUCTURE OF REPORT:

1. Evolution of the state of the art in the last 25 years
2. Best practices or solutions
3. Future developments

#### APPENDIXES:

- APPENDIX A: Summary of computational and physical modelling performed in European funded projects over the last 20 years
- APPENDIX B: Links between cracking and casting conditions

## Cracks in continuous casting: highlights of 25 years of RFCS research

### Basic Knowledge

- **The fundamentals of the crack formation: chemistry and physics**
- Gonzalo Alvarez De Toledo Bandeira and Nora Egido Perez – SIDENOR, Spain

### Modelling

- **Modelling of Continuous casting of steel: from virtual calculations to industrial reality**
- Pavel Ramirez Lopez – SWERIM, Sweden

### Process optimisation

- **Process optimisation strategies for crack reduction**
- Edoardo D'Amanzo – RINA, Italy

### Mould Powders

- **Mould powders**
- Stuart Higson – Material Processing Institute, UK

### Process control and sensors

- **Advanced sensing systems for improved control of casting operation**
- Kersten Marx – BFI, Germany

## Some of the next events

### VIDEO

#### Influence of microalloyed content on the billet continuous casting cracking

- Video of the workshop organized by Sidenor
- **End of June**
- Link to view video at [www.valcra.eu](http://www.valcra.eu)

### WEBINAR

#### Measuring techniques in Continuous Casting (laboratory)

- Web live event
- **15<sup>th</sup> of July**
- Organised by BFI

### WEBINAR

#### The role of mould powders in continuous casting: properties and operating conditions

- Web live event
- **End of July (date to be confirmed)**
- Organised by Material Processing Institute and RINA-CSM

### WEBINAR

#### Numerical Modelling in continuous casting

- Web live event
- **30<sup>th</sup> of September**
- Organised by SWERM

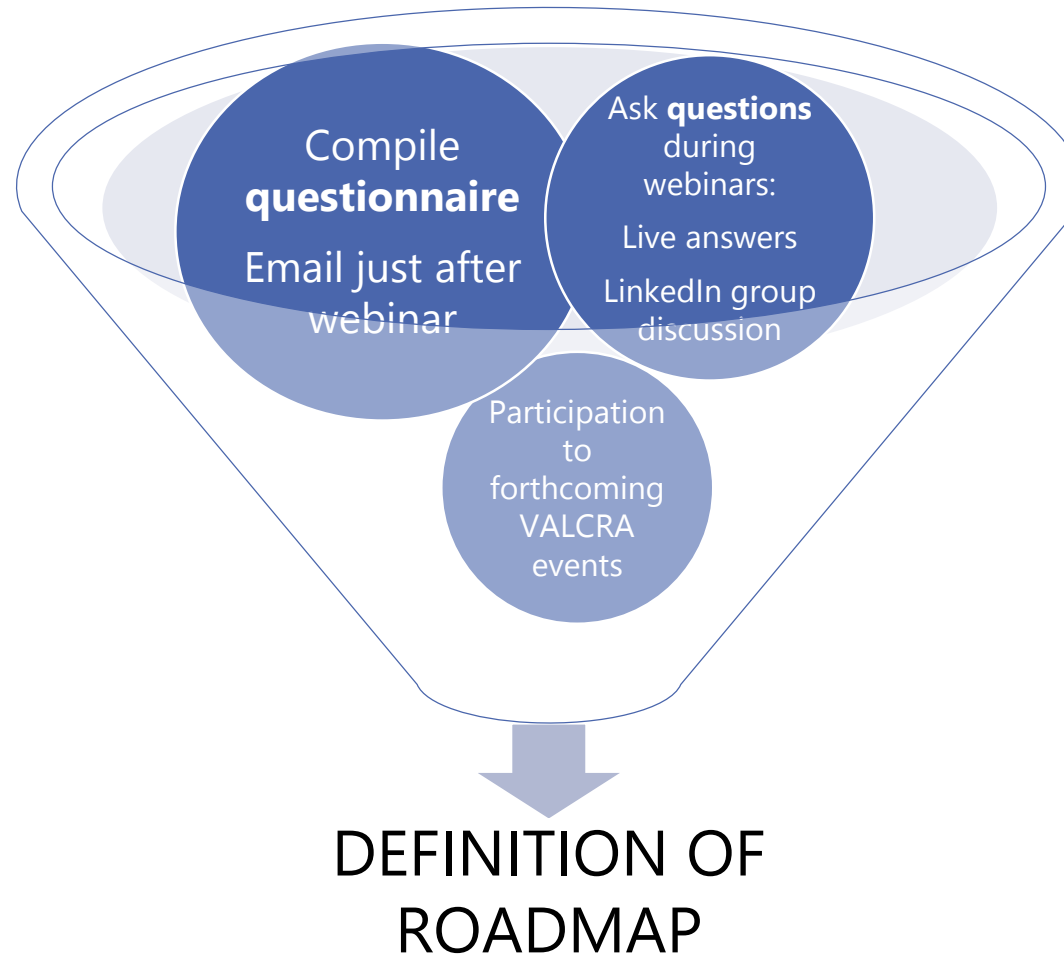




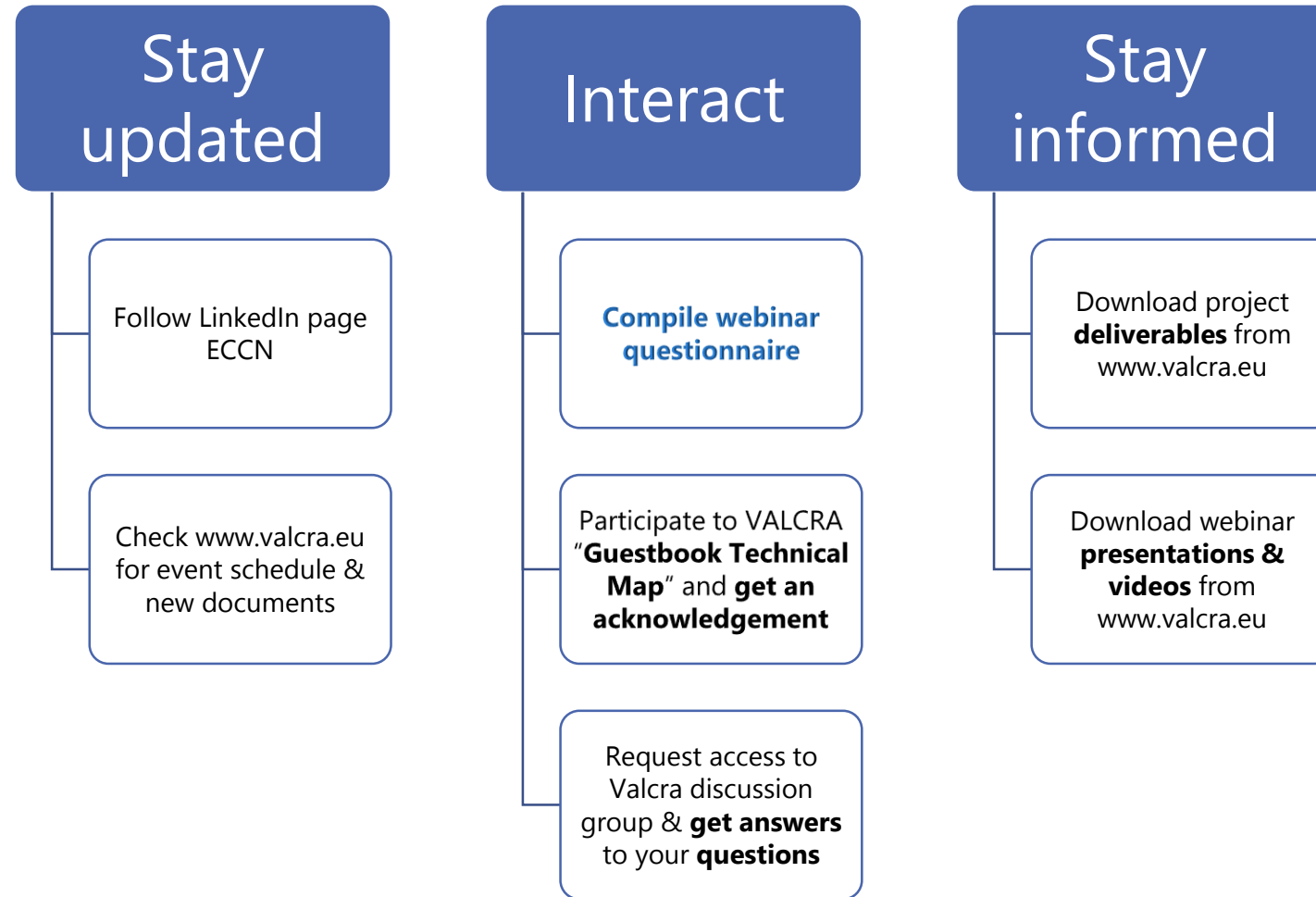
Enjoy the webinar!



## Build together the Roadmap for future research



## To-do list for webinar participants





Thank you for your attention!

