# 13<sup>th</sup> International Conference on Superplasticizers and Other Chemical Admixtures in Concrete

# 15<sup>th</sup> International Conference on Recent Advances in Concrete Technology and Sustainability Issues

Milan (Italy), July 10 - 15, 2022

Only in person

### Early Bird Registration extended to May 16

Organized by:

American Concrete Institute - Italy Chapter

University of Bergamo

Department of Engineering and Applied Sciences





# 13<sup>th</sup> International Conference on Superplasticizers and Other Chemical Admixtures in Concrete (SOCAC)

Milan (Italy), July 10 - 13, 2022

### Sponsored by:

ACI International – USA Federbeton – ITALY

### **Co-sponsored by:**

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### **Industry co-sponsors:**

Mapei Spa - ITALY
Master Builders Solutions Spa - ITALY
Calcestruzzi Spa - ITALY
Colabeton Spa - ITALY
Draco Italiana Spa - ITALY

### **Main topics**

Chemistry of superplasticizers Development and applications of superplasticizers compatibility with cements, blended cements, aggregates, etc. Compatibility issues involving superplasticizers and other chemical admixtures Development and applications of other chemical admixtures Development and applications of superplasticizers and other chemical admixtures for new binders Viscosity modifying admixtures Corrosion inhibitors Shrinkage reducing admixtures Expansive admixtures Polymers in concretes Chemical admixtures for ready-mixed mortars and precast concretes Admixtures and binders for digital fabrication Testing methods and standard advancement Chemical admixtures and sustainable development Case history

### **Conference Honorary Chairpersons**

Mario Collepardi – Enco Srl – ITALY V. Mohan Malhotra – Ottawa, ON – CANADA

### **Conference Chairperson**

Luigi Coppola - University of Bergamo - ITALY

### **Organizing Committee**

Pietro Gambarova – Polytechnic of Milan – ITALY Massimiliano Pescosolido – ATECAP, Federbeton – ITALY

### **International Scientific Committee**

Robert Flatt – ETH Zurich – SWITZERLAND (Chair) Walter Nussbaumer – Mapei Spa– ITALY Ivana Torresan – Master Builders Solutions Spa – ITALY

### **International Advisory Committee**

Giorgio Ferrari – Mapei Spa – ITALY (Chair) Johann Plank - TUM - GERMANY (Chair) Yun Bai - University College London - UK Nemkumar Banthia - University of British Columbia - CANADA Claude Bédard - Euclid Canada - CANADA Vlastimil Bilek Sr. - VSB Tech. Univ. Ostrava - CZECH REPUBLIC Didar Cheema - Curtin University - AUSTRALIA Denny Coffetti - University of Bergamo - ITALY Valeria Corinaldesi – Polytechnic University of Marche – ITALY Roberto Cucitore - Italcementi Spa - ITALY Terence Holland - Concrete Terry - USA Ara Jeknavorian – Jeknavorian Consulting Services - USA Harald Justnes - SINTEF - NORWAY Kamal Khayat - Missouri Univ. of Science and Technology - USA Lei Lei - TUM - GERMANY Roberta Magarotto - Master Builders Solutions Spa - ITALY

Pierre-Claver Nkinamubanzi – NRC – CANADA Marta Palacios – E. Torroja Inst. For Construction Science – SPAIN Ioanna Papayianni – Aristotle University of Thessaloniki – GREECE Francisca Puertas - E. Torroja Inst. For Construction Science – SPAIN

Surendra Manjrekar - Special Coatings Mumbai - INDIA

Etsuo Sakai – Tokyo Institute of Technology – JAPAN Wolfram Schmidt – BAM – GERMANY

Tongbo Sui – Sinoma International Engineering – CHINA Arezki Tagnit-Hamou – University of Sherbrooke – CANADA Francesca Tittarelli – Polytechnic University of Marche – ITALY Roberto Troli – Betonrossi Spa - ITALY Ziming Wang – Beijing University of Technology – CHINA

# 15<sup>th</sup> International Conference on Recent Advances in Concrete Technology and Sustainability Issues (RACTSI)

Milan (Italy), July 13 - 15, 2022

### Sponsored by:

ACI International – USA Federbeton – ITALY

### Co-sponsored by:

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### **Industry co-sponsors:**

Mapei Spa - ITALY
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## **Main topics**Sustainable issues and CO<sub>2</sub> emissions

CO<sub>2</sub> emissions reduction in the manufacturing of portland cement Durability and corrosion, service life prediction and life-cycles analyses Recycled and artificial aggregates Porous and no fines concretes Polymer concretes and polymer modified concretes Innovative and alternative test methods for concrete Alternative binders to portland cement Alkali-activated materials and geopolymers New concrete coating materials Use of industrial/agriculture byproducts for building materials Shrinkage compensating concretes Shotcretes and execution New reinforcements for concrete High performance concretes High density concretes Under-water concreting Concretes in marine environments Repairing works of damaged concretes Self-curing concretes Digital fabrication with concrete

### **Conference Honorary Chairpersons**

Mario Collepardi – Enco Srl – ITALY V. Mohan Malhotra – Ottawa, ON – CANADA

### **Conference Chairperson**

Luigi Coppola - University of Bergamo - ITALY

### **Organizing Committee**

Alfonso Di Bona- Calcestruzzi Spa - ITALY Tommaso Pastore - University of Bergamo - ITALY

### **International Scientific Committee**

Charles Nmai – Master Builders Solutions – USA (Chair) Alessandra Buoso – Master Builders Solutions Spa – ITALY Walter Nussbaumer – Mapei Spa – ITALY

### **International Advisory Committee**

Raffaele Cioffi – Parthenope University of Naples – ITALY (Chair)

Terence Holland – Concrete Terry – USA (Chair)

Yun Bai – University College London – UK

Nemkumar Banthia – University of British Columbia - CANADA

Nemkumar Banthia – University of British Columbia - CANADA Claude Bédard – Euclid Canada – CANADA

Vlastimil Bilek Sr. – VSB Tech. Univ. Ostrava – CZECH REPUBLIC Ezio Cadoni – SUPSI Lugano – SWITZERLAND Didar Cheema – Curtin University – AUSTRALIA Denny Coffetti – University of Bergamo – ITALY

Silvia Collepardi – Enco Srl - ITALY

Valeria Corinaldesi – Polytechnic University of Marche – ITALY Martin Cyr – University of Toulouse – FRANCE

Deborah Floris - Italcementi Spa - ITALY

Ravindra Gettu – Indian Institute of Technology Madras – INDIA Harald Justnes – SINTEF – NORWAY

Kamal Khayat – Missouri Univ. of Science and Technology - USA Surendra Manjrekar – Special Coatings Mumbai – INDIA Pierre-Claver Nkinamubanzi – NRC – CANADA

Marta Palacios – E. Torroja Inst. For Construction Science – SPAIN Ioanna Papayianni – Aristotle University of Thessaloniki – GREECE Francisca Puertas - E. Torroja Inst. For Construction Science – SPAIN

Etsuo Sakai – Tokyo Institute of Technology – JAPAN Wolfram Schmidt – BAM – GERMANY

Tongbo Sui – Sinoma International Engineering – CHINA Arezki Tagnit-Hamou – University of Sherbrooke – CANADA Francesca Tittarelli – Polytechnic University of Marche – ITALY Jean Marc Tulliani – Polytechnic of Turin – ITALY Ziming Wang – Beijing University of Technology – CHINA

# 13th International Conference on Superplasticizers and Other Chemical Admixtures in Concrete (SOCAC)

# 15th International Conference on Recent Advances in Concrete Technology and Sustainability Issues (RACTSI) Conference Venue and Date

Hotel Sheraton Milan San Siro Via Caldera, 3 – 20153 Milan (Italy) +39 02 915221 - www.sheratonmilansansiro.com Here you can find the e-brochure. https://www.zebrasd.com/e-brochure/SheratonMilanSanSiro/

Sheraton Milan San Siro is close-by to San Siro stadium and conveniently connected to Milan's airports. The metro station "M5 San Siro Stadio" is 10-minute walk away.

The organizers have reserved some rooms (July 10-15, 2022) at promotional prices for the participants of the conference until April 30, 2022 (Double room single use 140 €, double room 160 €, prices per night, breakfast included, excluded 10% VAT and city tax). Check availability at the following link https://www.marriott.com/events/start.mi?id=1650011828713&key=GRP

> Registration SOCAC: July 10, 2022 (late afternoon), July 11, 2022 (morning) Conference SOCAC: July 11-13, 2022 Registration RACTSI: July 13, 2022 (morning) Conference RACTSI: July 13-15, 2022 The closing ceremony of RACTSI is scheduled for 15 July at 1:00 pm

### **Presentation format**

All the accepted paper for the ACI Special Publication and Supplementary Volume can be presented orally. Approximately 20 minutes will be allocated for each oral presentation, including Q&A time. Electronic presentation facilities will be available including high resolution projector, microphone and PC. No poster sessions are scheduled.











### **Registration fees**

All those planning to attend SOCAC and RACTSI conferences (both speaker and listeners) must register and receive badges. Early and late registrations fees are offered as well as special student and accompanying people registration fees.

	SOCAC Conference (July 10-13, 2022)	RACTSI Conference (July 13-15, 2022)	Both conferences (July 10-15, 2022)
EARLY (by May 16, 2022)			
Full members	550 €	450 €	800 €
Students	400 €	300 €	600 €
Accompanying persons	200 €	150 €	300 €
LATE (after May 16, 2022)			
Full members	600 €	500 €	900 €
Students	450 €	350 €	700 €
Accompanying persons	250 €	200 €	400 €

All registrations have to be made on-line with payment by Bank Transfer only.

https://www.aciitaly.com/events/socac2021/registration/https://www.aciitaly.com/events/ractsi2021/registration/

### Fees include:

- Participation in the scientific sessions
- Hard copy of the conference proceedings published as ACI Special Publication (Scopus indexed). The Supplementary Volume will be available in electronic format only
  - Welcoming cocktail on July 10, 2022
  - Exclusive Award Banquet on July 13, 2022
    - Typical Italian "aperitivo" every evening
  - Lunches for the entire duration of the conference (excluding Friday)
  - Morning and afternoon coffee breaks for the entire duration of the conference

Please, remind that **to have your paper published in the conference proceedings** (ACI Special Publication or Supplementary Volume), **at least one author must register for the conference** 

(1 SOCAC registration = 1 SOCAC paper, 1 RACTSI registration = 1 RACTSI paper, 1 registration for both conferences = 2 papers).

### Authors of articles accepted for publication who decide to not participate at the Conferences can request the publication of their article for a fee of 200 €.

Evidence of student status (undergraduates, PhD students, junior research fellows) must be e-mailed to Conference Secretariat. No special program will be organized for accompanying persons. However, they are allowed to take part to the welcoming event, Italian "aperitivi" and Award Banquet.

Participants are encouraged to take advantage of the discount rate, applicable only if both registration and payment are received by May 16, 2022.

Information on rules to entry into Italy can be found on the following website

https://www.salute.gov.it/portale/nuovocoronavirus/dettaglioContenutiNuovoCoronavirus.jsp?lingua=english&id=5412&area=nuovoCoronavirus&menu=vuoto

### Visa application

Special letters of invitation to be used for visa application will be provided upon written request by the participant to the conference organizers. As the application for a visa may be a lengthy process, we recommend to start your visa application as soon as possible. Those attendees who need a visa are suggested to contact the Conference Secretariat indicating the following information: name, surname, date of birth, place of birth, nationality, titles (Ms., Mr., Dr., Prof.), affiliation, full postal address, passport number, issue and expiring dates of passport, date of arrival and departure. The Conference Organizing Committee is not able to contact Embassies in support of an individual attempting to gain entry to attend the conferences.

### Secretariat

Denny Coffetti
University of Bergamo
denny.coffetti@unibg.it
Valentina Trinchese
American Concrete Institute – Italy Chapter
aciitalychapter@gmail.com

#### Website

SOCAC Conference <a href="http://www.aciitaly.com/events/socac2021">http://www.aciitaly.com/events/socac2021</a>
RACSTI Conference

http://www.aciitaly.com/events/ractsi2021

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### **MEDIA PARTNER**



### The opening ceremony will be chaired by the ACI Int. President, Dr. Charles Nmai

### Awards will be presented on July 13, 2022

Valeria Corinaldesi for the

"Outstanding contributions in the wide area of fiber reinforced cementitious materials"

Alejandro Duran-Herrera for the

"Outstanding contributions in the wide area of concrete technology in Mexico"

Vijaya Rangan for the

"Outstanding contributions in the wide area of geopolymers for use in concrete"

Francesca Tittarelli for the

"Outstanding contributions in the wide area of sustainable cementitious materials"

### The 2<sup>nd</sup> Luca Bertolini memorial award is scheduled for July 13, 2022

### **Potential Invited Speakers**

Hela Bessaies Bey, IFFSTAR, France

"Viscosity modifying agents: key components of advanced cement-based materials with adapted rheology"

Shashank Bishnoi, IIT Delhi, India

"Limestone calcined clay cement and concrete: A state-of-the-art review"

**Denny Coffetti**, Uni. Bergamo, Italy "Pathways towards sustainable concrete"

Dimitri Feys, Uni. Missouri, USA

"Pumping of concrete: Understanding a common placement method with lots of challenges"

Robert J. Flatt, ETHZ, Switzerland

"Experimental method and thermodynamic model for competitive adsorption between polycarboxylate comb-copolymers"

**Tsuyoshi Hirata**, Nippon Shokubai Co, Japan and **Johann Plank**, TU Munich, Germany "40 Years of PCE Superplasticizers - History, Current State-of-the-Art and an Outlook"

**Shiho Kawashima**, Columbia University, USA "Nanoclays as a rheology modifying admixture"

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**Lei Lei**, TU Munich, Germany "Interaction Between Polycarboxylate Superplasticizers and Non-calcined Clays and Calcined Clays"

Marco Ormellese, Milan Polytechnic, Italy

"Recent advances in the use of inhibitors to prevent chloride-induced corrosion in reinforced concrete"

Christof Schroefl, TU Dresden, Germany

"Recent progress in superabsorbent polymers for concrete"

Prannoy Suraneni, Uni. Miami, USA

"A review of recent advances in the science and technology of seawater-mixed concrete"

Lori E. Tunstall, Colorado School of Mines, USA

"Air entraining admixtures: mechanisms, evaluations, and interactions"

Rob Wolfs, TU Eindhoven, Netherlands

"Recent advances in digital fabrication with concrete"







### **Full papers confirmed**

### - SOCAC -

"Use of Reinforced Concrete in the Skyscrapers of USA after Forty Years from the Erection of the Trump Tower in New York City where for the First Time Reinforced Concrete rather than Steel was Used" by M.Collepardi

"The MAXXI Building in Rome with the Long, Inclined and Curvilinear Reinforced Concrete Walls after 18 Years from their Construction" by G.Marchese et al.

"Experimental and Theoretical Investigations on the Adsorbed Layer Thickness of PCE Comb Polymers" by J.Plank et al.

"Use of Innovative Admixtures in Precast/Prestressed Concrete" by C.Nmai et al.

"Molecular Design of an Allylether PCE with Enhanced Clay Tolerance" by L.Lei et al.

"Effect of hydroxycarboxylate on the hydration and properties of high-belite calcium sulphoaluminate cement" by R.Tang et al.

"Meta-Analysis of PCE Structures as Dispersants in Cementitious Materials" by T.Gadt et al.

"Effect of calcium ions on bio-based polymers for rheology control" by W.Schmidt

"Thixotropic and chemical structural build-up of cement pastes with superplasticizer under different storage conditions" by A.Mezhov et al.

"Impact of comb-type superplasticizers on the rheological properties of limestone-calcined clay cements" by M.Palacios et al.

"The Influence of PCEs of Different Structure on Concrete Hardening at Various Temperatures" by A.Vovk
"The Value of Polycarboxylate-based Chemical Admixtures to Contractors and Engineers" by A.Jeknavorian
"A Holistic Perspective on the Role of Concrete Admixtures for Sustainable Concrete Construction" by
A.Jeknavorian

"Feasibility study on PCE based superplasticizers in calcined clay blended cements with focus on the type of phyllosilicate" by R.Sposito et al.

"Novel Hybrid Additive for Low-Carbon Concrete" by G.Ferrari et al.

"Nonionic Surfactants as Bubble Stabilizer in Concrete" by M.Quiao et al.

"The Influence of the Molecular Structure of PCEs on the Interaction with Expandable Clays" by F.Castiglioni et al.

"A novel polycarboxylate superplasticizer using polyvinyl alcohol as side chains: design, synthesis and characterization" by X.Liu et al.

"PCEs Molecular Structure Formation for Gypsum and Cement-Gypsum Binders" by A.Vovk

"Study on the Structural Characteristics and Copolymerization Activity of Polyether Macromonomers for Polycarboxylate Superplasticizer" by Z.Wang et al.

"Current status and development prospect of sprayed concrete and flash setting accelerating admixtures in China" by Z.Wang et al.

"Investigation of HPEG-PCEs as cement grinding aid and their effect on cement properties under laboratory conditions" by H.Yang et al.

"Mechanism study on the slow-release effects of polycarboxylate superplasticizers with different functional groups in cement pastes" by G.Haosheng et al.

"CO<sub>2</sub>-efficient mix design with an innovative strength- enhancing concrete admixture" by A.Olivo et al. "Influence of HPEG-based polycarboxylate on the flow properties of alkali-activated slag: sodium hydroxide and sodium carbonate activated systems" by H.Chan et al. "Phosphated Superplasticizers as Effective Water Reducing Agent for a-Calcium Sulfate Hemihydrate Systems" by M.L.Vo et al.

"Seeding Accelerator based on Nano Calcium Hydroxide" by P.Juilland et al.

"Study on Adsorption Behavior of Polycarboxylate Water-Reducing with Different Lithological Stone Powder" by L.Xiaoning et al.

"Effect of the PCE side chain length and grafting density on the plastic viscosity of cement paste" by D.Nicia et al.

"Self-Compacting Concrete for the Durable Reinforced Foundations of the Calatrava Bridge in Venice" by M.Collepardi et al.

"Combined Use of Calcium Nitrate and Fly Ash to Build ASR-Free Concrete Industrial Floors" by M.Collepardi et al.

"The effect of the charge density of a comb polyphosphate superplasticizer on the structural build-up of cement paste" by A.Mezhov et al.

"Concrete mix design made easy with chemical admixtures- A case study of a Ghanaian project" by M.Bediako et al.

"The effect of alkanolamine admixtures in the hydration of limestone calcined clay cements  $(LC^3)''$  by F.Zunino et al.

"Investigation on mechanical properties of mortars produced with potassium humate and vinyl acrylate monomer based chemical admixtures and statistical analysis data by SPSS Programme" by E.Surucu et al. "Long term performance of corrosion inhibitors in concrete" by F.Bolzoni et al.

"Impact of a novel slow absorption superabsorbent polymer on compressive strength and autogenous shrinkage of concrete" by Y.Akao

"Research and analysis of a novel water proofing agent with strength enhancing ability" by S.Ng et al.

"Influence of the hydroxypropylation of starch on its performance as viscosity modifying agent" by

A.Mezhov et al.

"Synthesis and Analysis of an Anti-segregation Admixture based on Acrylamide Copolymer" by T.Ni et al.

"Fresh and Hardened Properties of Engineered Cementitious Composites (ECCs) with Sodium

Lignosulfonate" by A.T.Atmajayanti et al.

"Effect of solution chemistry on superplasticizers in alkali-activated slag" by C.Paillard et al. "Methylsiliconate as Set-Retarding Admixture" by K.Materak et al.

"Novel perspective to explain the retarding effect of organic admixtures in silicate-activated slag" by V.Bilek et al.

"Competitive Adsorption of PCE and Lignosulfonate as Manifested in Initial Slump and Slump Retention Behavior" by A.Vovk

"A New Class of Concrete Additives (NT)" by S.Hamoush et al.

### **Full papers confirmed**

#### - RACTSI -

"Overview of European Norms' Requirements for the Design of Durable Reinforced Concrete Structures" by R.Troli et al.

"Evaluation of the Potential Use of a New Aluminum Silicate in Green Concrete Products" by P.C.

Nkinamubanzi et al.

"Innovative Admixtures to Address Operational and Sustainability Issues with Returned Concrete" by C.Nmai et al.

"Effective protection of concrete against carbonation by a protective render coating" by I.Janotka et al.

"Equivalent Strength of Concretes Manufactured with a Ground Mineral Addition from MIBA" by

S.Collepardi et al.

"Equivalent Durability of Concretes Manufactured with a Ground Mineral Addition from MIBA" by S.Collepardi et al.

"Microstructure of Cement/Clay paste with Aluminum bar after 1 year storage in Fresh Water and in 6% NaCl" by H.Justnes et al.

"Superplasticizers for Calcined Clay Blended Cements" by R.Li et al.

"A Review of Current Superplasticizers Highlighting Their Specific Properties and Advantages" by J.Plank et al.

"Influence of bitumen-based coatings on the penetration of radon gas emanating from ground through different concrete types" by I.Antunes et al.

"Future Houses by Future Concrete (KandCrete)" by I.M.Kandil

"Study of the effect of different type of clays on the initial flowability of mortars in the presence of polycarboxylate superplasticizers" by P.Fornoni et al.

"Multiple self-healing of water-absorbing microcapsules in cementitious materials" by Q.Mao et al.

"Recycled self-compacting concrete: mechanical behavior and durability" by V.Revilla-Cuesta et al.

"Self-sensing mortars with recycled carbon-based fillers and fibers" by A.Belli et al.

"Characterization of Recycled Asphalt Pavement as aggregate for concrete" by A.Filippi et al.

"Ambient cured geopolymer binder in road pavement-subgrade stabilisation as a replacment of conventional cement" by D.S.Cheema

"Very High-Performance Fiber Reinforced Concrete (VHPFRC) Testing and Finite Element Analysis" by V.Romaniello et al.

"Mix-Design of a Long-Term Durable Concrete for the Reinforced Foundations in the Bridge on the Straits of Messina, Italy" by R.Troli et al.

"Effect of different environmental exposures on the mechanical behavior of enhanced carbon FRCM systems" by J.Donnini et al.

"Influence of carbonated RCA on the hardened properties of concrete" by N.Russo et al.

"Concrete workability improvement with the knowledge of the physical chemical characteristics of the admixtures" by F.Curto et al.

"Influence of steel fibers on durability properties of UHPFRC" by B.P.Maffezzoli et al.

"The conservation state of highway foundation bridge piles" by C.Paglia et al.

"Lowering the clinker factor of limestone calcined clay cements (LC<sup>3</sup>) below 50%: a comparison with natural pozzolans" by F.Zunino et al.

"Fresh Properties of Alkali-Activated Slag Pastes with Sodium and Potassium Hydroxide" by V.Bilek Jr et al.

- "Direct tensile behaviour of UHPFRC under high strain rates" by E.Cadoni et al.
- "Effect of aggregates and layer height on the acoustic absorption of pervious concrete" by N.Klein et al. "Monitoring of creep and shrinkage in a newly built reinforced concrete structure – preliminary results "by O.Abe et al.
  - "Recycled Concrete Aggregate from Construction and Demolition Waste: characterization and use in sustainable concretes" by B.Malchiodi et al.
- "Flexural Behavior of Concrete Mixtures with Waste Tyre Recycled Aggregates" by V.Romanazzi et al. "Influence of cement type and curing conditions on the flexural strength and microstructure of mortars
  - reinforced with sheep wool fibers" by A.P.Fantilli et al. "Supersulphated cements from waste materials" by V.Bilek Sr et al.
- "Mix-Designs of Concretes in Durable Reinforced and Prestressed Structures of a Viaduct for a Railway Train Connecting Venice with Cortina, in Italy" by R.Troli et al.
  - "Preliminary study of lightweight concrete with recycled EPS aggregates" by M.Carsana et al.
- "Measurement of the radiation shielding performance of GRC composite materials" by O.Akalin et al.
- "Analysis of the effect of three-stage mixing on the properties of concrete with recycled aggregates and various mineral additives" by A.Sicakova
- "Assessment of the Reinforced Concrete Piles of a Highway Bridge after 35 Years after their Repairs" by S.Collepardi et al.
- "Characterization of Quarry Waste Powder for Calcined Clay Production" by Y. Villagran-Zaccardi et al. "Rehabilitation of buildings polluted by the radon radioactivity" by M.Collepardi et al.
  - "Bond behavior of steel rebars in High-Performance Fiber Reinforced Concretes: experimental evidences and possible applications for structural repairs" by M.Pepe et al.
  - "Experimental study on papercrete bricks and mortar from recycling paper" by G.Ausiello et al.
- "Data-driven decision-making to inform sustainable performance-based specifications" by R.Rios et al. "Multi-objective design of LC3: Sustainability and Strength" by O.Canbek et al.
- "Low-Grade Kaolinite Clays for Sustainable Binders Effect of mineralogy and curing temperature on hydration products" by T.Danner et al.
  - "Synergistic effect of CDW's as eco-pozzolans: ternary cements" by R.Garcia-Gimenez et al.
  - "Low-Carbon Durable Concrete for the New Genoa's San Giorgio Bridge" by F.Surico et al.
- "Effects of steel fiber content and curing time on mechanical properties and drying shrinkage of Ultra High Performance Concrete (UHPC)" by J.Donnini et al.
  - "Different solutions for microbiologically induced corrosion resistant concrete: a concrete study" by D.Passalacqua et al.
  - "Known properties of concrete to produce high quality recycled cementitious material for buildings" by C.Paglia et al.
  - "Production of lightweight aggregates by means of cold-bonding granulation process of municipal solid waste incinerator (MSWI) fly-ash" by I.Farina et al.