



International SANTANDER Eco-Concrete Conference



INGECID

16,17 Dec, 2021

Santander
Spain

Information

Nowadays, one of the main problems of modern societies is the generation of large quantities of waste and/or by-products from industrial activities, such as siderurgical slag. The management and valorisation of these materials is one of the main challenges in the search to mitigate and reduce the negative impacts on the environment. The valorisation of wastes is becoming increasingly important as a means to improve the efficient use of materials and avoid the negative effects associated with natural resources within the current framework "Design and Innovation for a circular economy."

Eco-concrete

Concrete is one of the most widely used materials and its primary constituent material, cement, releases large amounts of carbon dioxide into the Earth's atmosphere for production. Also, large amounts of natural resources have been consumed to produce aggregates for concrete. So obviously, it is not possible a sustainable construction without changes in concrete technology and turning it into eco-concrete. Eco-concrete uses waste materials as at least one of its components, or its production process does not lead to environmental degradation and has strength and stability. The relationship between the percentage of replacement of natural aggregate using alternative aggregate in two parts of coarse aggregate and fine-grained aggregate and the effect of each of these parts on mechanical properties in concrete is investigated, which may identify the optimal mix proportions of each aggregate that help to improve the strength of the eco-efficient concrete.

Schedule

16th Thursday

16:00 Welcome and inauguration

16:15 Keynote speech

CARLOS THOMAS

University of Cantabria

Eco efficient concrete.

16:45

MARÍA VICTORIA BORRACHERO ROSADO

Valencia Polytechnic University

Sostenibilidad en construcción a través de materiales:

Valorización de catalizadores gastados (FCC) en la industria del cemento.

17:05

ALI AGHAJANIAN

University of Cantabria

Effect of electric arc furnace slag into eco-concrete.

17:25

PABLO TAMAYO CASTAÑEDA

University of Cantabria

Estudio de la adherencia y de la dureza del hormigón con áridos siderúrgicos.

17:45 COFFEE BREAK

18:05

KIACHEHR BEHFARNIA

Isfahan University of Technology

Application of recycled aggregates in alkali-activated slag concrete pavement.

18:25

FERNANDO LÓPEZ GAYARRE

University of Oviedo

Mechanical properties of ultrahigh performance reinforced fibres concrete (uhprfc) manufactured using mining waste.

18:45

MARÍA ISABEL SÁNCHEZ DE ROJAS GÓMEZ

Instituto de Ciencias de la Construcción Eduardo Torroja

Residuos en la fabricación de cementos para una construcción sostenible.

19:05

VITOR ALENCAR NUNES

CEFET-MG

Recent advances in the reuse of steel slags and the future perspectives applications in alkali-activated materials.

19:25

DIEGO FERNANDO APONTE

Polytechnic University of Catalonia

Posibilidad de utilización de escorias de afino en hormigones de bajo impacto ambiental.

Schedule

17th Friday

9:30 Keynote speech

JORGE DE BRITO

Instituto Superior Técnico

Recycled aggregate concrete: Lessons learned.

10:00

FRANCISCO AGRELA & MANUEL ROSALES

University of Córdoba

Aplicación de áridos reciclados mixtos y cenizas volantes de biomasa de olivo en la fabricación de cementos eco-híbridos.

10:20

FRANCISCO FIOL OLIVAN

University of Burgos

Hormigones autocompactantes de altas prestaciones con reciclaje de productos en la industria del prefabricado.

10:40

JOSÉ A. SÁINZ-AJA GUERRA

University of Cantabria

Effect of temperature on fatigue behaviour of self-compacting recycled aggregate concrete.

11:00

CÉSAR MEDINA MARTÍNEZ

University of Extremadura

Los áridos reciclados mixtos en la industria del hormigón.

11:20 COFFEE BREAK

11:50

GILBERTO DE JESÚS GARCÍA DEL ÁNGEL

University of Cantabria

Utilización de arena de fundición en materiales base cemento.

12:10

JULIA ROSALES GARCÍA & JOSÉ LUIS DÍAZ

University of Córdoba

Aplicación a escala real de cenizas de fondo de biomasa y nanomateriales para la estabilización de suelos.

12:30

ADRIÁN ISIDRO YORIS NÓBILE

University of Cantabria

Uso de arenas y adiciones reciclados en morteros para impresión en 3D.

12:50

BELÉN GONZÁLEZ FONTEBOA

University of A Coruña

Diseño y caracterización de eco-hormigones autocompactantes con cementos ternarios.

Conference Chair

❖ Carlos Thomas

Spain

Scientific committee

❖ ALI AGHAJANIAN (Chair)

Iran

❖ ANA ISABEL CIMENTADA HERNANDEZ

Spain

❖ ADRIÁN ISIDRO YORIS NÓBILE

Spain

❖ ANDREA PELLON MENDOZA

Spain

❖ BELÉN GONZÁLEZ FONTEBOA

Spain

❖ CÉSAR MEDINA MARTÍNEZ

Spain

❖ CARLOS THOMAS

Spain

❖ DIEGO FERNANDO APONTE

Colombia

❖ FRANCISCO AGRELA

Spain

❖ FRANCISCO FIOL OLIVAN

Spain

❖ FERNANDO LOPEZ GAYARRE

Spain

❖ GILBERTO DE JESÚS GARCÍA DEL ÁNGEL

México

❖ JOSÉ A. SÁINZ-AJA GUERRA

Spain

❖ JORGE DE BRITO

Portugal

❖ JOSÉ LUIS DÍAZ

Spain

❖ JOSÉ LUIS MOURA

Spain

❖ JULIA ROSALES GARCÍA

Spain

❖ KIACHEHR BEHFARNIA

Iran

❖ MARÍA ISABEL SÁNCHEZ DE ROJAS GÓMEZ

Spain

❖ MARÍA VICTORIA BORRACHERO ROSADO

Spain

❖ MANUEL ROSALES

Spain

❖ PABLO TAMAYO CASTAÑEDA

Spain

❖ VITOR ALENCAR NUNES

Brazil

Organization committee

❖ ALI AGHAJANIAN

Iran

❖ ANA ISABEL CIMENTADA HERNANDEZ

Spain

❖ ANDREA PELLON MENDOZA

Spain

❖ CARLOS THOMAS

Spain

❖ GILBERTO GARCIA DEL ANGEL

México

❖ PABLO TAMAYO CASTAÑEDA (Chair)

Spain



ECO-CONCRETE