



1ST International SANTANDER Eco-Concrete Conference



IN GECID

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
MARIA 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

BELÉN GONZÁLEZ FONTEBOA

University of Coruña

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

□ 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

GILBERTO DE JESÚS GARCÍA DEL ÁNGEL

University of Cantabria

Utilización de arena de fundición en materiales base cemento.

Conference Chair

- ❖ Carlos Thomas

Spain

Scientific committee

- ❖ ALI AGHAJANIAN (Chair) Iran
- ❖ ANA ISABEL CIMENTADA HERNANDEZ Spain
- ❖ ADRIÁN ISIDRO YORIS NÓBILE Spain
- ❖ ANDREA PELLÓN 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

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- ❖ GILBERTO GARCIA DEL ANGEL México
- ❖ PABLO TAMAYO CASTAÑEDA (Chair) Spain



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