

Editorial

EDITOR-IN-CHIEF EMERITUS

- José Luiz Antunes de Oliveira e Sousa, Universidade Estadual de Campinas – UNICAMP, Campinas, SP, Brazil
jl@s@unicamp.br

EDITOR-IN-CHIEF

- Guilherme Aris Parsekian, Universidade Federal de São Carlos – UFSCAR, São Carlos, SP, Brazil
parsekian@ufscar.br

ASSOCIATED EDITORS

- Antonio Carlos dos Santos, Universidade Federal de Uberlândia – UFU, Uberlândia, MG, Brazil
- Bernardo Horowitz, Universidade Federal de Pernambuco – UFPE, Recife, PE, Brazil
- Bernardo Tutikian, Universidade do Vale do Rio dos Sinos – UNISINOS, São Leopoldo, RS, Brazil
- Daniel Domingues Loriggio, Universidade Federal de Santa Catarina – UFSC, Florianópolis, SC, Brazil
- Edgar Bacarji, Universidade Federal de Goiás – UFG, Goiânia, GO, Brazil
- Edna Possan, Universidade Federal da Integração Latino Americana – UNILA, Foz do Iguaçu, PR, Brazil
- Fernando Pelisser, Universidade Federal de Santa Catarina – UFSC, Florianópolis, SC, Brazil
- Fernando Soares Fonseca, Brigham Young University – BYU, Provo, UT, USA
- José Marcio Fonseca Calixto, Universidade Federal de Minas Gerais – UFMG, Belo Horizonte, MG, Brazil
- José Tadeu Balbo, Universidade de São Paulo – USP, São Paulo, SP, Brazil
- Leandro Mouta Trautwein, Universidade Estadual de Campinas – UNICAMP, Campinas, SP, Brazil
- Lia Lorena Pimentel, Pontifícia Universidade Católica de Campinas – PUCCAMP, Campinas, SP, Brazil
- Mauricio de Pina Ferreira, Universidade Federal do Pará – UFPA, Belém, PA, Brazil
- Mauro de Vasconcellos Real, Universidade Federal do Rio Grande – FURG, Rio Grande, RS, Brazil
- Osvaldo Luis Manzoli, Universidade Estadual Paulista “Júlio de Mesquita Filho” – UNESP, Bauru, SP, Brazil
- Paulo Cesar Correia Gomes, Universidade Federal de Alagoas – UFAL, Maceió, AL, Brazil
- Rafael Giuliano Pileggi, Universidade de São Paulo – USP, São Paulo, SP, Brazil
- Ricardo Carrazedo, Universidade de São Paulo – USP, São Carlos, SP, Brazil
- Sérgio Hampshire de Carvalho Santos, Universidade Federal do Rio de Janeiro – UFRJ, Rio de Janeiro, RJ, Brazil
- Túlio Nogueira Bittencourt, Universidade de São Paulo – USP, São Paulo, SP, Brazil
- Vladimir Guilherme Haach, Universidade de São Paulo – USP, São Carlos, SP, Brazil

EDITORIAL COMMISSION

- Antonio Carlos R. Laranjeiras, ACR Laranjeiras, Salvador, BA, Brazil
- Emil de Souza Sánchez Filho, Universidade Federal Fluminense, UFF, Rio de Janeiro, RJ, Brazil
- Geraldo Cechella Isaia, Universidade Federal de Santa Maria, UFSM, Santa Maria, RS, Brazil
- Gonzalo Ruiz, Universidad de Castilla-La Mancha – UCLM, Ciudad Real, Spain
- Ivo José Padaratz, Universidade Federal de Santa Catarina – UFSC, Florianópolis, SC, Brazil
- Joaquim de Azevedo Figueiras, Faculdade de Engenharia da Universidade do Porto – FEUP, Porto, Portugal
- Paulo Monteiro, University of California Berkeley, Berkeley, CA, USA
- Pedro Castro Borges, CINVESTAV, Mérida, Yuc, México
- Vladimir Antonio Paulon, Universidade Estadual de Campinas – UNICAMP, Campinas, SP, Brazil

FORMER EDITORS

- Américo Campos Filho, Universidade Federal do Rio Grande do Sul – UFRGS, Porto Alegre, RS, Brazil
- Denise C. C. Dal Molin, Universidade Federal do Rio Grande do Sul – UFRGS, Porto Alegre, RS, Brazil
- Eduardo Nuno Brito Santos Júlio, Instituto Superior Técnico – IST, Lisboa, Portugal
- Guilherme Sales Melo, Universidade de Brasília, UnB, Brasília, DF, Brazil
- Leandro Francisco Moretti Sanchez, University of Ottawa, Ottawa, ON, Canada
- Luiz Carlos Pinto da Silva Filho, Universidade Federal do Rio Grande do Sul – UFRGS, Porto Alegre, RS, Brazil
- Mounir Khalil El Debs, Universidade de São Paulo – USP, São Carlos, SP, Brazil
- Nicole Pagan Hasparyk, Eletrobras Furnas, Aparecida de Goiânia, GO, Brazil
- Paulo Helene, Universidade de São Paulo – USP, São Paulo, SP, Brazil
- Roberto Caldas de Andrade Pinto, Universidade Federal de Santa Catarina – UFSC, Florianópolis, SC, Brazil
- Ronaldo Barros Gomes, Universidade Federal de Goiás – UFG, Goiânia, GO, Brazil
- Romilde Almeida de Oliveira, Universidade Católica de Pernambuco – UNICAP, Recife, PE, Brazil
- Romildo Dias Toledo Filho, Universidade Federal do Rio de Janeiro – UFRJ, Rio de Janeiro, RJ, Brazil
- Rubens Machado Bittencourt, Eletrobras Furnas, Aparecida de Goiânia, GO, Brazil

REVIEWERS

Reviewers are selected by the Editors among IBRACON members with acknowledged competence in the specific area of each submission. Their contribution is acknowledged yearly, at the end of each volume. If necessary, the Editors will assign nonmembers as reviewers.

The first issue of the 2020 volume of the IBRACON Structures and Materials Journal (Volume 13, Number 1, February 2020) is published. Twelve articles discuss relevant topics on structural concrete. The issue begins with an evaluation of the influence of metakaolin on the mechanical properties, porosity and, in particular, on the carbonation of concrete, from the addition of 0%, 5%, 10% and 15% of metakaolin, in relation to the cement mass. The second article presents the use of numerical model techniques to identify and locate damage adopting the Modal Curvature Difference (MCD) method as reference in the analysis of concrete plates simply supported on rubber bearings. In order to analyze the influence of polymer fibers on the thermal properties of concrete, the work described in the third article assessed the thermal conductivity, the thermal expansion, and the compressive strength of concrete specimens with addition of polypropylene fibers and concrete specimens with addition of high modulus polyethylene, after exposure to 200-°C temperature. The fourth article aims to identify the modal parameters of Bridge 44 on the Carajás Railroad, using experimental on-site data obtained by monitoring the vibration caused by a group of people jumping at the deck. These data are compared with finite element modeling results. The fifth article presents a statistical analysis of reinforced concrete pipes design procedures. The sixth article presents an experimental study aiming to evaluate the relationship between the properties of four different concrete mixes produced in accordance with the specifications of EN 1992-1 and EN 206 standards and its performance during carbonation and salt spray accelerated testing. In the seventh article, numerical models are developed in order to assess the effective stiffness of elastomeric bearing pads under precast beams for the limit load of lateral instability considering combinations of the beam span length and cross-section and lateral eccentricities. The eighth article proposes a new flexural design model for reinforced concrete beams considering the ductility factor. The ninth article focuses on the physical-mechanical potential properties of wastes from glass lapping to produce mortar as partial replacement of the conventional aggregate. The purpose of tenth article is to compare the specification on the ACI 318/2014, AASHTO and ABNT NBR 6118: 2014 codes related to shear and torsion, assessing results from experimental data obtained in the literature. The eleventh article presents a study on the applicability of a concrete elastoplastic model in the analyses of a theoretical framework describing the Cutting Plane return mapping algorithm. The last article in this issue presents an analysis of the global stability of flat-slab tall buildings considering the soil-structure interaction.

We acknowledge the dedication of authors and reviewers to the quality of this issue.

The Editors