



**“Gheorghe Asachi” Technical University of Iasi, Romania**



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## **INSTRUMENT FOR ASSESSING THE SUSTAINABLE INNOVATION CAPACITY OF PROFESSIONALS IN CONSTRUCTION**

**Elaine Resende<sup>1\*</sup>, Paulo Resende<sup>2</sup>, Pedro Pires<sup>3</sup>, Carlos Alberto Pereira Soares<sup>1</sup>**

<sup>1</sup>*Graduate Program in Civil Engineering, Fluminense Federal University, Rua Passo da Patria,  
156, Bloco D, sala 365, Niterói, Rio de Janeiro, Brazil*

<sup>2</sup>*FINEP – Brazilian Innovation Agency, Ministry of Science and Technology, Avenida República do Chile 330,  
Torre Oeste, Rio de Janeiro, Brazil*

<sup>3</sup>*Fluminense Federal University, University in Rio das Ostras. Rua Recife-1-7 lots, container 4,  
Jardim Bela Vista, Rio das Ostras, Rio de Janeiro, Brazil*

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### **Abstract**

Architects and engineers play an important role in the choice of innovative and environmentally sustainable materials and techniques. To define these materials and techniques, they mobilize competencies acquired throughout their lives. To learn the profile of the environmentally innovative architect and engineer in Brazil, we created a self-assessment instrument that allows us to identify essential characteristics in practice, namely, which competencies are mobilized when they choose an environmentally innovative material and/or technique. Our study uses the concept of competencies, which proposes an analysis of four dimensions: Professional, organizational, innovative and customer-related. The instrument consists of a validated scale of 64 items of professional profile evaluation, which was applied to 95 selected professionals. The items were elaborated based on a literature review and on the authors' personal experiences. We used the IRT (item response theory) model for psychometric analysis; our properties of interest were dimensionality, reliability, validity, and scalability. Because this instrument is divided into sections, it can be analyzed by blocks or as a single scale. It is ready to use, and its internal consistency ranges from acceptable to excellent, with varying degrees of difficulty for the latent traits.

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\* Author to whom all correspondence should be addressed: e-mail: [arq.elaineresende@gmail.com](mailto:arq.elaineresende@gmail.com); Phone: 5521981232204