

## REPORT OF THE HABILITATION BOARD

September 6<sup>th</sup>, 2013

**Name and first name of the candidate:** GHIAUȘ Adrian-Gabriel

**Title of the habilitation thesis/ main research directions:**

**Processes and equipment in industrial and civil engineering / Modeling and experimentation in drying processes; CFD analysis of air flow; Innovative DIC technology; Energy efficiency in buildings.**

**Field of doctoral studies:** (in which, the quality of Ph.D. Supervisor will be awarded): **Civil engineering**

**Name of the organizing institution for doctoral studies** ("IOSUD" in Romanian) where the public presentation of the thesis is being held  
**"Politehnica" University of Timisoara.**

**Strong features of the habilitation thesis:**

1. Heat and mass transfer in the drying processes, combined theory, laboratory measurements and candidate scientific papers.
2. The quality of performed research with clear elements of visibility and international recognition, chapters in scientific books (Nova Science Publishers Inc., Jones and Bartlett Publishers) articles in international ISI journals and many conference in the field.
3. The paper presents novel elements for sludge dewatering, development of an experimental model, application of DIC technology and, for the first time, numerical investigation of a new gas-liquid separator used in petroleum industry.

**Weak features of the habilitation thesis:**

1. Combination of drying process and HVAC of buildings: this part was not to be combined.
2. The structure and the clarity of written thesis.
3. In the list with representative works are also included works without relevant scientific value.

**Results of the vote/ remarks/ conclusions** of the Habilitation Board are motivated further.

The commission has voted the acceptance of the habilitation thesis of Mr. Adrian-Gabriel GHIAUȘ and proposes to be issued of Habilitation Certificate.

**Results of the secret vote** regarding the acceptance of the habilitation thesis following the public presentation:

***Prof.dr.ing. Ioana IONEL:*** agree

***Prof. Branislav TODOROVIĆ, Ph.D.:*** agree

***Prof.dr.ing. Gheorghe DUMITRAȘCU:*** agree

**Remarks / Conclusions of the board:**

Given the above, and in conjunction with the final form and content of the proposed habilitation thesis, we believe that interdisciplinary work proposed by the author proves the quality and originality claimed by the author, based on multi-criteria analysis (civil and industrial engineering with elements from thermodynamics of buildings), developed from experience and practical solutions (and achieved through theoretical and experimental researches) of specific concrete problems in general construction of buildings and modern meet current requirements imposed by developing a habilitation thesis is valuable in terms content is characterized by originality and persuasiveness and constitutes a contribution to the defining of reorganization and restructuring of the construction sector in Romania, which leads me to recommend its public support for the award of habilitation Title for Dr. GHIAUȘ Adrian-Gabriel.

Habilitation Board:

Name and first name

1. *Prof.dr.ing. Ioana IONEL*, President,  
"Politehnica" University of Timisoara



2. *Prof. Branislav TODOROVIĆ, Ph.D.*  
University of Belgrade



3. *Prof.dr.ing. Gheorghe DUMITRAȘCU*  
Technical University "Gheorghe Asachi" of Iasi

