

**CONSILIUL NAȚIONAL DE ATESTARE A TITLURILOR,
DIPLOMELOR ȘI CERTIFICATELOR UNIVERSITARE
NATIONAL COUNCIL FOR ATTESTATION OF
ACADEMIC TITLES, DIPLOMAS AND CERTIFICATES
(CNATDCU)**

**RAPORTUL COMISIEI DE ABILITARE
REPORT OF THE HABILITATION COMMISSION**

din data de (date) 29 iunie 2018 / June 29, 2018

NUMELE și Prenumele candidatului (SURNAME and Forename of the candidate):
Conf.dr. Nicolae LEOPOLD

Titlul tezei de abilitare / direcțiile principale de cercetare (Title of habilitation thesis / main research areas):
Engineered Metal Nanoparticle Structures Towards Interaction With Cells, Molecules And Light

Domeniul de studii universitare de doctorat (Field of doctoral studies):

Fizică/Physics

în care urmează să se confere calitatea de conducător de doctorat (future field of doctoral supervision)

Denumirea **Instituției Organizatoare de Studii Universitare de Doctorat (IOSUD) / Instituției Organizatoare de Doctorat (IOD)** unde are loc susținerea publică a tezei de abilitare

(Name of the institution organizing doctoral studies (IOSUD), (IOD), where the public defense of the habilitation thesis takes place)

Universitatea Babeș-Bolyai, Cluj-Napoca / Babeș-Bolyai University, Cluj-Napoca

Punctele tari ale tezei de abilitare (Strong points of the habilitation thesis):

1. The candidate fulfills at least two times the CNATDCU minimal standards (A = 2, I=4, P=4, C=40)

Candidate's factors are:

Didactic and professional activity: A=5.38

Research activity: I=8.89, P = 10.10

Research impact: C=512.99

Hirsch factor: 15

Total CNATDCU points: 43.5

2. The originality of the habilitation thesis is clearly demonstrated by the implementation of new and original methods of nanoparticle synthesis for coupling with analytical methods (electrophoresis, chromatography, microfluidics), and for new solutions for improving SERS detection, as well.
3. The candidate's research activities are well focused and the research work already performed is the ideal basis for becoming a well recognised university professor.
4. The candidate demonstrates new and original ideas for his future research activity, focused on the fabrication of biocompatible nanoparticles for biomedical applications (Raman imaging of cells, hyperthermy by surface plasmon resonance).

5. The candidate demonstrated very well his didactic capabilities necessary for a successful career in teaching as a future university professor.
6. The candidate has already demonstrated the ability to train young scientists and to build his own research group of students. This is a strong premise for his ability to supervise PhD students. The scientific collaboration with national and international scientific groups is also very well demonstrated.

Punctele slabe ale tezei de abilitare (**Weak points** of the habilitation thesis):

None

Rezultatul votului / observații / concluziile comisiei de abilitare se motivează în continuare
(**Voting result / observations / premises for the conclusions** of the *habilitation commission* are as follows)

The candidate, dr. Nicolae Leopold, fulfils all the CNATDCU requirements to receive the habilitation degree.

All the members of the jury voted for awarding the habilitation degree to dr. Nicolae Leopold.

(a se continua pe verso – dacă este necesar) (continue overleaf if necessary)

COMISIA DE ABILITARE
HABILITATION COMMISSION


NUMELE și Prenumele
SURNAME and Forename

Semnătura
Signature

1. Prof.dr. Dietrich Zahn



2. Conf dr. habil. Cristian Enăchescu



3. Prof.dr. Simion Aștilean