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Design and development of novel layered nanostructured hybrid materials for environmental, medical, energy and catalytic applications

Potsi, Georgia

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Document Version

Publisher's PDF, also known as Version of record

Publication date:

2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Potsi, G. (2016). Design and development of novel layered nanostructured hybrid materials for environmental, medical, energy and catalytic applications [Groningen]: University of Groningen

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Design and development of novel layered nanostructured hybrid materials for environmental, medical, energy and catalytic applications

This PhD thesis is the result of an effort that started 4 years ago at the Ceramics and Composites Laboratory in University of Ioannina and was continued at the Zernike Institute for Advanced Materials in University of Groningen.

The front cover page designed by Antonios Kouloumpis represents an aluminosilicate clay structure and a graphene sheet. The photos used show: Pfizer's Unisom Diphenhydramine pills, (source Flickr, licensed under the Creative Commons Attribution), an Industrial Refinery Petroleum Plant, (source <https://pixabay.com>, free photo), a close shot of wind turbines at a wind farm (source: <http://www.public-domain-image.com/public-domain-images-pictures-free-stock-photos/wallpapers-public-domain-images-pictures/a-close-shot-of-wind-turbines-wind-farm.jpg>, public domain, not copyrighted, no rights reserved, free for any use).

Zernike Institute PhD thesis series 2016-32
ISSN: 1570-1530
ISBN: 978-90-367-9340-7 (print)
ISBN: 978-90-367-9339-1 (digital)



university of
 groningen



University of Ioannina

Design and development of novel layered nanostructured hybrid materials for environmental, medical, energy and catalytic applications

PhD thesis

to obtain the degree of PhD of the
University of Groningen
on the authority of the
Rector Magnificus Prof. E. Sterken
and in accordance with
the decision by the College of Deans.

and

to obtain the degree of PhD of
University of Ioannina
on the authority of the
Rector Prof. G. Kapsalis
and in the accordance with
the decision of the General Meeting
of the Department of Materials Science and Engineering

Double PhD degree

This thesis will be defended in public on

Friday 16 December 2016 at 12.45 hours at University of Groningen
&
Wednesday 21 December 2016 at 12.00 hours at University of
Ioannina

by

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Keep Ithaka always in your mind.
Arriving there is what you're destined for.
But don't hurry the journey at all.
Better if it lasts for years,
so you're old by the time you reach the island,
wealthy with all you've gained on the way,
not expecting Ithaka to make you rich.

Ithaka gave you the marvelous journey.
Without her you wouldn't have set out.
She has nothing left to give you now.

And if you find her poor, Ithaka won't have fooled you.
Wise as you will have become, so full of experience,
you'll have understood by then what these Ithakas mean..

By C. P. CAVAFY

Translation by E.Keele

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