Danish Committees on Scientific Dishonesty Forsknings- og Innovationsstyrelsen/ Danish Agency for Science Technology and Innovation

[PARTY]

Final decision by the Danish Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (RNTP).

You wrote to the Danish Committees on Scientific Dishonesty on 6 May 2009.

In your letter you stated that you had been accused of plagiarism by one of your former supervisors [SUPERVISOR], and you wanted to be cleared of the accusations of plagiarism made by [SUPERVISOR]. During the subsequent written hearing, [SUPERVISOR] extended his accusations. In his correspondence [SUPERVISOR] also put forward allegations concerning other individuals.

The case has been processed by the Danish Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (RNTP).

The members who have processed the case are: Chairman Henrik Gunst Andersen, and members Peter Sigmund, Lars Døvling Andersen, Susanne Bødker, Erik Lundtang Petersen, Berthe Marie Willumsen and Dorte Hammershøi.

The case has been processed according to Act on Research Advisory System, etc. (Consolidated Act no. 1064 of 6 September 2010 on the Research Advisory System, etc.) and Executive Order No. 306 of 20 April 2009 on the Danish Committees on Scientific Dishonesty.

Preliminary decision

The RNTP reached a preliminary decision which was sent to you for consultation by letter of 22 June 2011. You replied by e-mail of 5 August 2011 and your comments have been duly considered by the RNTP.

Final decision

The RNTP has come to the final conclusion that you cannot be cleared of accusations of scientific dishonesty. This decision is based primarily on your Ph.D. thesis "[Ph.D. THESIS]", in which large parts have been plagiarized from the thesis of [AUTHOR] ("Ph.D.-TITLE").

See further explanations in detail below.

24. august 2011

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Sagsnr. 09-054260 Side 1/9 See Annex 1 for a brief introduction to the work of the Danish Committees on Scientific Dishonesty.

See Annex 2 for Summary proceedings.

The considerations and the final conclusion of the RNTP

With reference to Section 1, number 4, of Executive Order No 306 of 20 April 2009, the RNTP finds that the case falls within the jurisdiction of the RNTP because:

- your thesis "[Ph.D. THESIS]" has been published in Denmark
- the scientific work in question, your thesis, has been prepared during your employment in Denmark
- the committee considers your thesis to be a scientific product
- the RNTP considers you to be scientifically trained within the area of research of your thesis.

The RNTP has found it within its jurisdiction to consider the parts of your thesis connected to the later claims in the case made by [SUPERVISOR].

Below you will find the RNTP's considerations relating to the original issue and the later claims in the case made by [SUPERVISOR].

Original issue – clearing of your name of claim of plagiarism from [ARTI-CLE 1] by [SUPERVISOR]

In your original letter to the DCSD you wanted your name cleared of claims of scientific dishonesty by one of your former supervisors [SUPERVISOR].

The accusations were specifically related to plagiarism of [SUPERVISOR]'s article "[ARTICLE 1]" in sections 5.3 and 5.4 in your thesis."

According to your letter you put an insert into the printed version and into the online version of the thesis with the wording "With regard to Chapter 5 the author acknowledges the paper [ARTICLE 1]". The insert was included after correspondence with the editor of the journal [JOURNAL].

The RNTP has found the insert in the internet version of your Ph.D thesis.

In view of your insert into the online version of the thesis, and in view of the fact that this has been negotiated with and accepted by the editor of the journal, the RNTP finds that credit has been given to [SUPERVISOR] regarding reference to his article "[ARTICLE 1]. Therefore, the RNTP did not follow up this accusation any further.

Plots and figures in section 4.2 of your thesis

[SUPERVISOR] claims that all plots and figures in section 4.2 were taken from his article [ARTICLE 2]. You have replied that you produced all figures in section 4.2 (Figures 4.1, 4.2, 4.3, 4.4 and 4.5.)

The figures are listed below. They are found in your thesis and in [SUPERVI-SOR]'s article, respectively.

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Your figures in thesis (2006) [SUPERVISOR] figures in article (2000)

4.1 (page 96) 1 (page 253)
4.2 (page 97) 3 (page 254)
4.3 (page 100) 5 (page 258, extracted)
4.4 (page 100) 6 (page 259, extracted)
4.5 (page 101) 7 (page 259)

Because all these figures also exist in [SUPERVISOR]'s article: [ARTICLE 2], and because figures 4.1 and 4.2 exist in [AUTHOR]'s thesis (see in detail below in this letter), the RNTP does not find it acceptable that you take credit for them as you do via their presentation in your thesis.

The RNTP considers your figures 4.1 and 4.2 to be typical textbook illustrations, and therefore not subject to the strict requirement for referencing. In figure 4.3 and 4.4 a reference is made to [ARTICLE 3], but not to [SUPERVISOR]'s explanation with the aid of the friction theory.

The proper sources should have been cited for all five figures 4.1-4.5, but especially for 4.3, 4.4 and 4.5 the RNTP considers the lack of reference to be a serious omission.

Because you have not given proper credit and cited the relevant sources in the figures the RNTP finds that you have displayed scientific dishonesty in the form of plagiarism.

Figures in section 5.5 of your thesis

[SUPERVISOR] claims that most of the figures in section 5.5 are taken from his works and you claim that you have produced the figures yourself.

The figures are listed below. Most of them (except figure 5.21) are found in both your thesis and in the article [ARTICLE 4] respectively, of which [SUPERVISOR] was the main author and you were a co-author.

| Your figures | Figures in article [ARTICLE 4 | |
|---|--|--|
| 5.18a (p. 156) 5.18b (p. 156) 5.19a (p. 157) 5.19b (p. 157) 5.20a (p. 157) 5.20b (p. 157) 5.20c (p. 157) 5.21 (p. 158) | 2 (p. 718) 3 (p. 718) 11 (p. 720) 6 (p. 719) 8 (p. 719) 9 (p. 720) 10 (p. 720) | |
| 3.21 (p. 136) | | |

It is the opinion of the RNTP that the figures 5.18-5.20 in your thesis are identical with the figures in the article. Because you were a co-author of the article you may use these figures without a reference, although it is good scientific practice to indicate that each figure has been previously published - with a reference.

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Figure 4.9 in your thesis

[SUPERVISOR] claims that some figures were plagiarized from several of his presentation ppt.-files including figure 4.9 in your thesis. You have denied this to be the case.

The RNTP has not looked into this question, since different standards apply to presentation files.

Plagiarizing from [AUTHORS]'s thesis

[SUPERVISOR] claims that sections of [AUTHOR]'s thesis have been copied and pasted into your thesis.

To this you have replied: "Please be informed that one of my former supervisors was the main developer of the friction theory. Friction theory was an important part of my thesis, and for this reason I gave a very complete description of the model and devoted a whole chapter to it (Chapter IV). Many of the friction theory articles (more than fifteen) have received acknowledgment in chapter IV.

Sections 4.2 and 4.2.1 are similar to sections 1.7.1, again simply because we are both describing the same model. However, in this case [AUTHOR] was precisely one of the three developers of the model ([AUTHOR]'s thesis has also received acknowledgement in chapter IV)."

The two theses cover different but related topics. [AUTHOR] ([AUTHOR]) primarily looks at oil and you primarily look at refrigerants. The so-called friction theory or f-theory, which has been developed by [SUPERVISOR] in cooperation with [AUTHOR] and [OTHER AUTHOR] (2000), plays an important role in both works. Because of this there are good reasons for some degree of overlap.

The RNTP has compared section 4.2 in your thesis with section 1.7 in [AUTHOR] thesis, and found the following items to be identical:

| Equations | Your thesis | [AUTHOR] |
|-----------|---|--|
| | 4.1-4.16 | 1.7.1-1.7.16 |
| | 4.23-4.30 | 1.7.24-1.7.31 |
| | 4.38-4.42 | 1.7.39-1.7.42 |
| Figures | 4.1 | 1.32 |
| | 4.2 | 1.33 |
| Tables | 4.5 (except from the last three lines) 1.20 | |
| Text | pp. 95-99 p. 106 pp. 108-10 p. 113 p. 121 | pp. 89-93 pp. 101-102 pp. 118-21 p. 125 p. 141 |

Although you have made reference to [AUTHOR]'s thesis on page 109 (listed as reference 29 on the reference list p. 128), this refers to a specific aspect. At no

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point in the thesis - and specifically not in the beginning of chapter 4, where key papers are quoted – has it been made clear to the reader that large parts of this chapter have been taken over word by word, equation by equation and figure by figure, from [AUTHOR]'s thesis.

It is the opinion of the RNTP that you have displayed scientific dishonesty in the form of plagiarism by plagiarizing the above mentioned parts of the thesis by [AUTHOR] titled "[Ph.D.-TITLE]".

Complaints regarding three employees at the [UNIVERSITY]

By letter of 16 April 2010 [SUPERVISOR] extended his complaints to include professor [PROFESSOR], senior lecturer [SENIOR LECTURER 1] and senior lecturer [SENIOR LECTURER 2] working at the [UNIVERSITY].

The [UNIVERSITY] commented on behalf of the three employees stating that it is not clear which form of scientific dishonesty [SUPERVISOR] accuses them of, and recommended that [SUPERVISOR]'s claims against the three persons be dismissed.

RNTP has considered [SUPERVISOR]'s complaints regarding the three persons mentioned above and found that the complaints do not fall within the jurisdiction of the Danish Committees on Scientific Dishonesty. The RNTP will not take any further action on this matter.

Letter of information to the [UNIVERSITY]

A copy of this decision will be sent to the [UNIVERSITY] for information. This is due primarily to the fact that you were employed by the [UNIVERSITY] during your research and development of your Ph.D. thesis considered by RNTP, and that your different supervisors in that regard were designated by the university.

No means of administrative appeal

This decision is final and may not be brought before any other administrative authority, cf. Section 34 of Consolidated Act no. 1064 of 6 September 2010 on the Research Advisory System, etc.

Sincerely,

Henrik Gunst Andersen Chairman for the Danish Committees on Scientific Dishonesty

Annex 1

Brief introduction to the work of the Danish Committees on Scientific Dishonesty (DCSD).

The purpose of the DCSD is to process cases relating to scientific dishonesty which are important to Danish research. The DCSD shall conclude the consideration of the cases by making a statement.

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Scientific dishonesty is defined as: falsification, fabrication, plagiarism and other serious violation of good scientific practice committed wilfully or grossly negligent on planning, performance or reporting of research results including plagiarisation of other persons' results or publications.

The DCSD can not consider cases involving the validity or truth of scientific theories or cases involving the research quality of a scientific product.

The work of the DCSD is based on the Consolidated Act no. 1064 of 6 September 2010 on the Research Advisory System etc. and on Executive Order no. 306 of 20 April 2009 on The Danish Committees on Scientific Dishonesty.

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Annex 2

Summary proceedings

[PARTY] wrote to the Danish Committees on Scientific Dishonesty on May 6th, 2009.

In his letter he stated that he had been accused of plagiarism by one of his former supervisors [SUPERVISOR]. According to his letter the accusations were specifically related to plagiarism of [SUPERVISOR]'s article "[ARTICLE 1]" in sections 5.3 and 5.4 in his thesis."

According to the letter an acknowledgement note was inserted in the printed and online versions of [PARTY]'s thesis after correspondence with the editor of the [JOURNAL].

By letter of July 10th, 2009 [SUPERVISOR] sent his preliminary remarks. [SUPERVISOR] remarked that in his opinion the DCSD has no jurisdiction in the case. He also wrote "...this is a lot more than an obvious, clear an open case of plagiarism, rather, this is a very serious case of corruption."

By letter of September 2nd, 2009 [SUPERVISOR] sent his further remarks.

For instance he wrote (p.2-3): "However, it is relevant to still point out that the copyright infringement is not just limited to my [ARTICLE 1]. Several other of my published and unpublished work as well as that of my previous student [AUTHOR] has been reproduced throughout [PARTY]'s thesis without permission. Just some examples are the following:

- All the plots and figures in section 4.2 were taken without my permission from my article [ARTICLE 2].
- Most of the figures in section 5.5 were also taken from my work without my authorization. I acknowledge that some of these figures I used in an article where I also listed [PARTY] as co-author ([ARTICLE 3]. However, the contribution of [PARTY] to the manuscript was minimum. Furthermore, in addition to the fact I am the main corresponding author on the article, most of the figures related to previous work I had done years before as single author ([ARTICLE 2]). The bottom line is that I am the one who made all the plots and figures and I never authorized the use of my personal material in [PARTY] thesis.
- Some other figures were even plagiarized from several of my presentation ppt-files. Some of them are presentations I even gave before [PAR-TY] arrived to the [UNIVERSITY], such as Fig. 4.9 on the thesis, which has been taken from my presentation in Rostock, Germany, during the [CONFERENCE].

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- The list goes on and on to the point that even sections of the thesis of my previous student [AUTHOR] were copied and pasted into [PARTY]'s thesis. This I am sure was also done without authorization – I am attaching extracts of both thesis for comparison purposes. Most relevant, no credit that I can find the been given to [AUTHOR] for having copied sections of his thesis into [PARTY] thesis."

In letter of November 6th, 2009 [PARTY] responded to [SUPERVISOR]'s claims.

Regarding the [ARTICLE 1] [PARTY] wrote (p. 4): "I acknowledge that I used his [ARTICLE 1] as a source of inspiration and understanding during his time supervision." And later continued: "None of the figures of the [ARTICLE 1] have been re-used or adapted to the thesis. As explained before, I carried out all the calculations of the thesis with programs written by myself."

Regarding the [ARTICLE 2] [PARTY] wrote (p. 6): "Section 4.2 introduces the friction theory and its description follows the argumentation of the original article. The mentioned article and many others of friction theory have received acknowledgment on several occasions in the thesis.

I produced all figures in Section 4.2. Figures 4.1 og 4.2 show some basic concepts of the model. They were obtained by using the tools AutoShapes and Draw of the Microsoft Office application Word." (......)

As for the rest of the figures (Figs. 4.3, 4.4 and 4.5 they display pressure-viscosity (P- μ) behaviour for methane (CH₄). I used *Mathematica* and Excel again."

Regarding the figures in section 5.5 [PARTY] wrote (p.6): "In addition to the fact that I am one of the co-authors of the paper, I produced all the figures in section 5.5 (Figs. 5.18, 5.19, 5.20 and 5.21) using three software programs SPECS, *Mathematica* and Excel (SPECS is a program developed at the IVC-SEP Center that allows performing different thermodynamic calculations). "

Regarding [SUPERVISOR]'s claim that [PARTY] had plagiarized from his presentation ppt-files, [PARTY] wrote (p. 7): "I have not taken figures from "several of his presentation ppt.files". I do not even remember the [CONFERENCE], Rostock, Germany."

Regarding [SUPERVISOR]'s claim that [PARTY] had "copy-pasted" from [AU-THOR] in his thesis, [PARTY] wrote (p. 7): "Section 3.2 in the thesis describes the viscosity behaviour versus temperature pressure and composition. This topic has been investigated by from [AUTHOR] before, and therefore the same terms of expressions are utilized in some parts of section 3.2."

By e-mails of November 25th, and 27th, 2009 [PARTY] sent various correspondence regarding the [ARTICLE 1] indicating that he agreed to put an insert in the printed version and in the online version of the thesis with the wording "With regard to Chapter 5 the author acknowledges the paper [ARTICLE 1]."

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By letter of May 18th, 2010 the RNTP asked [PARTY] to comment on certain phrasing and wording similarities in his thesis compared to the thesis of [AUTHOR] and to submit the operational mathematical programs.

By letter of June 8th, 2010 [PARTY] sent his comments to the RNTP regarding various sections of his thesis.

Regarding Sections 4.2 and 4.2.1 (the friction theory model) pp. 95-99 [PARTY] wrote: "Please be informed that one of my former supervisors was the main developer of the friction theory. Friction theory was an important part of my thesis, and for this reason I gave a very complete description of the model and devoted a whole chapter to it (Chapter IV). Many of the friction theory articles (more than fifteen) have received acknowledgment in chapter IV.

Sections 4.2 and 4.2.1 are similar to sections 1.7.1, again simply because we are both describing the same model. However, in this case [AUTHOR] was precisely one of the three developers of the model ([AUTHOR]'s thesis has also received acknowledgement in chapter IV)."

In letter of April 16th, 2010 [SUPERVISOR] extended his complaint to include professor [PROFESSOR], senior lecturer [SENIOR LECTURER 1] and senior lecturer [SENIOR LECTURER] working at the [UNIVERSITY].

By letters of May 25th, 2010 the RNTP asked for comments from Head of Department [HEAD OF DEPARTMENT], senior lecturer [SENIOR LECTURER 1] and senior lecturer [SENIOR LECTURER 2].

By letter of June 23rd, 2010 the [UNIVERSITY] sent a reply on behalf of the three employees stating that is not very clear which form of scientific dishonesty [SUPERVISOR] accuses them of and recommended that [SUPERVISOR]'s claims against them be dismissed.

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