## Confidential

## Review of USB RIFCH PhD Thesis

Surname of the PhD student: Ing. Martin Pšenička	
Name of supervisor: prof. Ing. Otomar Linhart, DrSc.	
Title of PhD thesis: Ultrastructure of spermatozoa and fertilization process in sturgeon.	
REVIEWER:	reproperty international contraction (C. C. Mariane, C. C. Mari
Surname:	
Cosson	Institution: CNRS France and University of French
Name:	Polynesia
Jacky	
Titles: professor and PhD.	
E-mail: jacky.cosson@obs-vlfr.fr	
Please describe your field of expertise:	
structure and movements of spermatozoa□□□□	

## **QUESTIONNAIRE**

Originality, scientific importance, prospects of the PhD thesis and benefits for basic or applied research Evaluate its competitiveness in the international context and compare its level with the current state of the art in the field:

One main quality in scientific research is tenacity: this is exactly the trait of character which was developed by M. Psenicka during his PhD thesis. In addition, his numerous publications of M. Psenicka appeared in international journals of excellent level and are frequently quoted because of the originality of the results.

Preparation of the PhD thesis, targets of the work and deliverables

Evaluate the overall level of preparation of the PhD thesis and the originality of the selected approaches; evaluate publications and whether the targets set in the PhD thesis correspond with the declared purpose of the thesis: When M. Psenicka started doing some research, his shyness was pushing him to often say: "I know nothing". Since that time he learned a lot, specially to be patient in research, but never lost his modesty. M. Psenicka has acquired excellent ability to feel comfortable with a very special set of techniques for biological observation: Electron Microscopy. This is typically demanding endless time to reach valuable sets of images leading to description of unknown biological objects, and this is exactly what he succeeded to do to explore tiny details of an unexpected complexity which are arranged as unique structures present in some fish sperm heads, those of chondrostean. His long series of EM observations has been gradually combined with additional descriptions by fluorescence microscopy leading to mechanical suggestions about these unusual intracellular organelles. He gradually collaborated with several specialists of this or that aspect of sperm structure and physiology and many publications of international level came out of his thesis work which is, by the end, in good adequation with the initial aim of his PhD

## OVERALL COMMENTARY ON THE PhD THESIS

Please write comments:

student who succeeded within the PhD period to acquire an international notoriety and originaity

FINAL RECOMMENDATION

can be recommended for defence of PhD Thesis

