



# 13th International Conference « EUROPE-INBO 2015 » for the implementation of the European Water Directives

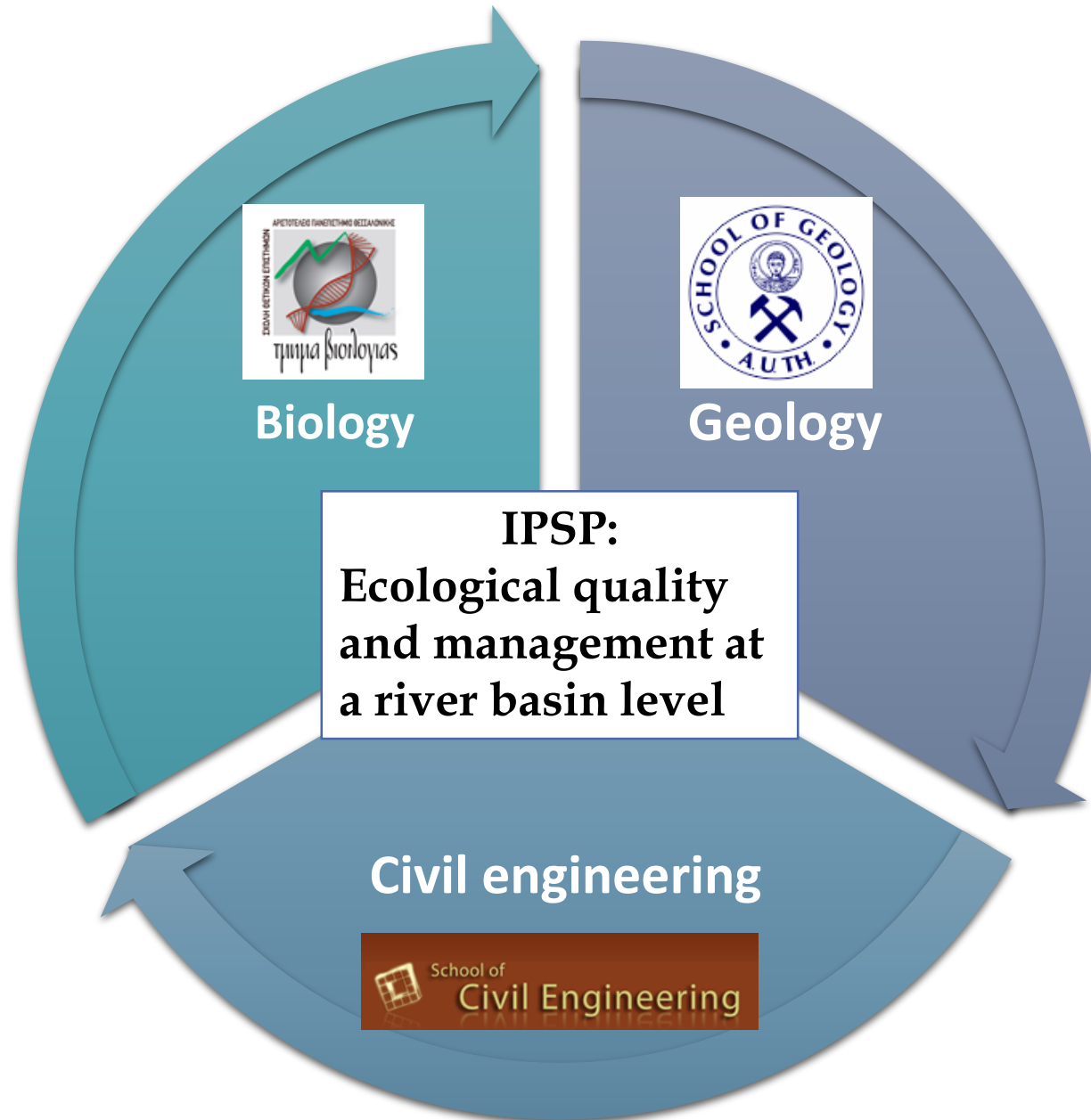
Ecological quality and management at a river basin level  
(IPSP)

On behalf of the participating staff in IPSP  
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# Ecological quality and management at a river basin level

<http://www.bio.auth.gr/dpms/default.htm>



ΑΡΙΣΤΟΤΕΛΕΙΟ  
ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΘΕΣΣΑΛΟΝΙΚΗΣ

Διατμηματικό Μεταπτυχιακό Πρόγραμμα Σπουδών

Οικολογική ποιότητα και διαχείριση υδάτων  
σε επίπεδο λεκάνης απορροής

των Τμημάτων Βιολογίας, Γεωλογίας και Πολιτικών Μηχανικών του Α.Π.Θ.



ΕΙΣΟΔΟΣ

Aristotle University of Thessaloniki  
Department of Biology  
541 24 Thessaloniki



ENTER

# Interdisciplinary Postgraduate Study Programme (I.P.S.P.) "Ecological quality and management at a river basin level"

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**Start Time:** Academic year 2007-2008

**Funding:** None

**Responsible institutions:** The Schools of Biology, Geology and Civil Engineering.

A Selection Committee evaluates the candidates according to points awarded to criteria for admission

**Duration of studies/total workload:** 3 semesters, 90 ECTS.

**All courses/projects are compulsory:** eight (8) courses, completion of internship during one month (September), a case study of a basin done in groups, MSc thesis/student.



Programme of Study	IPPS Ecological Water Quality and Management at a River Basin Level
Collaborating Schools	Biology Geology Civil Engineering
Cycle / Level	2nd / Postgraduate
Academic Year	2014 - 2015

1st semester  
 8 classes

Code	Title	ECTS	Type
I1	Physical functions of a river basin	2	COR
I2	Methods of sampling, Typology. Remote sensing. GIS	6	COR
I3	Land use. Human pressures. Impact assessment	2	COR
I4	Monitoring of the ecological quality. Biotic indices	8	COR
I5	Assessment of the ecological quality and classification	2	COR
I6	Socioeconomic management. Environmental education and awareness. Management Authorities of protected areas. Legislation	4	COR
I7	Simulation alternative scenarios. Management at a basin level	4	COR
I8	Restoration of aquatic ecosystems	2	COR

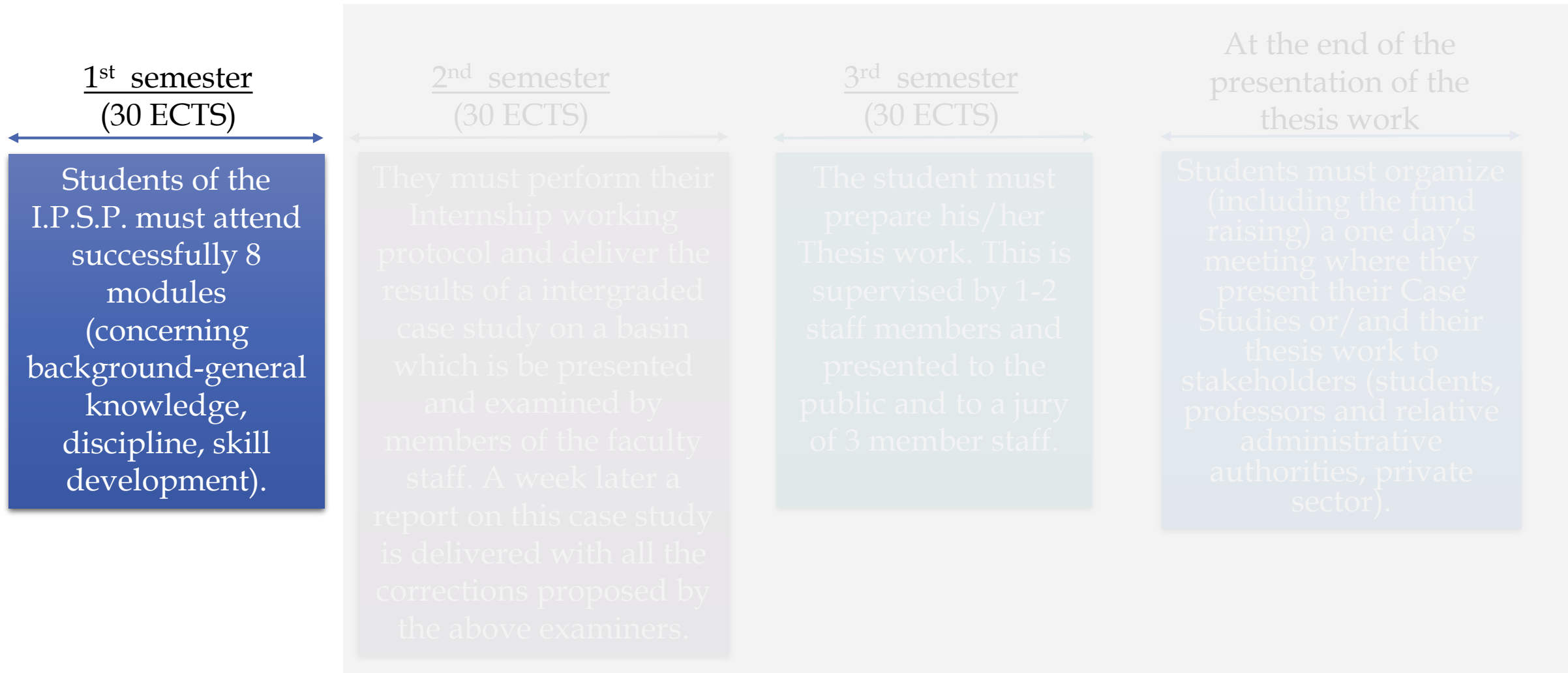
2nd semester  
 2 classes

Code	Title	ECTS	Type
I9	Case Study	15	COR
I10	Internship	15	COR

3rd semester  
 1 classes

Code	Title	ECTS	Type
I11	Diploma Thesis	30	COR

# Study programme



# Study programme

1<sup>st</sup> semester  
(30 ECTS)

Students of the I.P.S.P. must attend successfully 8 modules (concerning background-general knowledge, discipline, skill development).

2<sup>nd</sup> semester  
(30 ECTS)

They must perform their Internship working protocol and deliver the results of an intergraded case study for a river basin in a written report and present it orally to examiners of the faculty staff.

3<sup>rd</sup> semester  
(30 ECTS)

The student must prepare his/her Thesis work. This is supervised by 1-2 staff members and presented to the public and to a jury of 3 member staff.

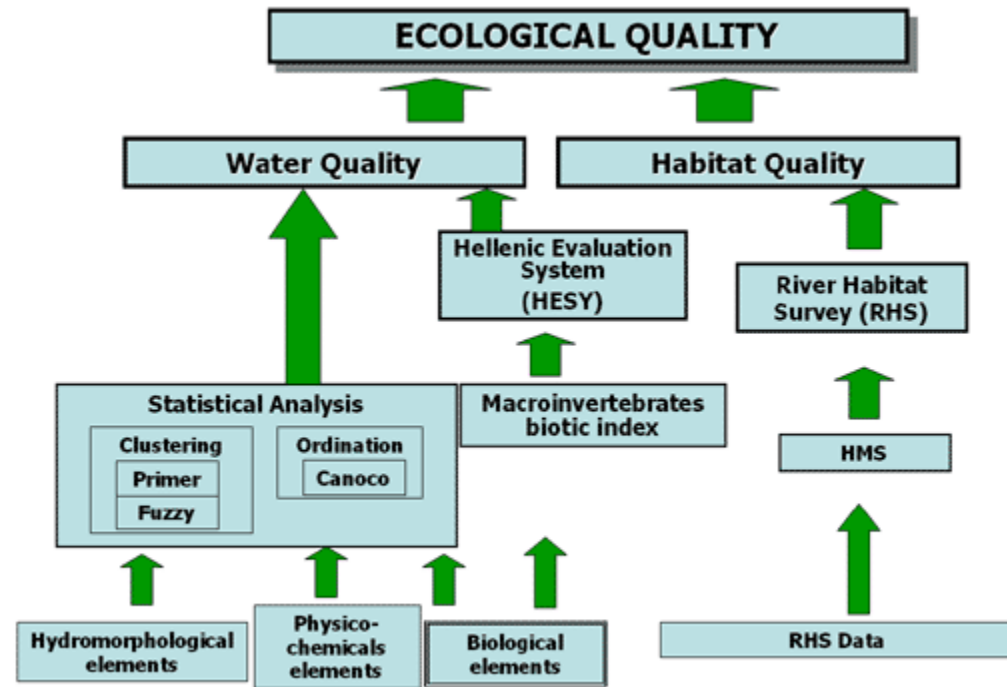
At the end of the presentation of the thesis work

Students must organize (including the fund raising) a one day's meeting where they present their Case Studies or/and their thesis work to stakeholders (students, professors and relative administrative authorities, private sector).

**Evaluation of the modules and teachers-Internship evaluation by the entities**



Organogram with the relevant steps that the students follow when they undertake a case study in river or lake studying the water and habitats' quality





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(30 ECTS)

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2<sup>nd</sup> semester  
(30 ECTS)

They must perform their Internship working protocol and deliver the results of a intergraded case study on a basin which is be presented and examined by members of the faculty staff. A week later a report on this case study is delivered with all the corrections proposed by the above examiners.

3<sup>rd</sup> semester  
(30 ECTS)

The student must prepare his/her Thesis work. This is supervised by 1-2 staff members, presented publicly and examined by a jury of 3 member staff.

At the end of the presentation of the thesis work

Students must organize (including the fund raising) a one day's meeting where they present their Case Studies or/and their thesis work to stakeholders (students, professors and relative administrative authorities, private sector).

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# The graduate student of the I.P.S.P.

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Has acquired a systemic approach for monitoring water ecosystems and management of watersheds and concern of the environment, society and sustainable development after the completion of the theoretical courses, the laboratory work, internship and field work concerning an intergraded case study.

Upon the termination of the programme requirements the student handles:

- ✓ Data bases (MS Access)
- ✓ Bibliographic bases (e.g. Refworks)
- ✓ Logistic platforms like Blackboard, remote sensing
- ✓ GIS, CORINE CLC 2000, simulation models, IMPRESS, DSPIR, SWOT analyses
- ✓ Univariate and multivariate analyses (e.g. CLUSTER, CANOCO, FUZZY)



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ΑΡΧΙΚΗ

ΝΟΜΟΘΕΣΙΑ-ΚΑΝΟΝΙΣΜΟΣ

ΕΠΙΤΡΟΠΕΣ

ΠΡΟΓΡΑΜΜΑ ΣΠΟΥΔΩΝ

ΕΚΔΗΛΩΣΕΙΣ

ΑΝΑΚΟΙΝΩΣΕΙΣ

ΕΠΙΚΟΙΝΩΝΙΑ

Τίτλοι Μελετών Ειδικευσης

Δημοσιεύσεις

Case Studies

Διπλωματικές

Εκτίμηση της οικολογικής ποιότητας του νερού της λίμνης Βόλβης με βάση το φυτοπλαγκτό

Εκτίμηση της οικολογικής ποιότητας του νερού της λίμνης Δοϊράνης με βάση το φυτοπλαγκτό και το ζωοπλαγκτό

Παρακολούθηση της ιχθυοπανίδας και των υδρομορφολογικών παραμέτρων του ποταμού Ρήχιου σύμφωνα με την Οδηγία 2000/60/ΕΚ

Οικολογική κατάσταση και ανάλυση πιέσεων στον ποταμό Σοφαδίτη

Σύγκριση Ποτάμιων Τοπολογικών Συστημάτων στην Ελλάδα

Λεκάνη Απορροής της λίμνης Βόλβη

Αποτίμηση της Αξίας του Αρδευτικού Νερού στην Περιοχή της Βόλβης (Υδατικό Διαμέρισμα Κεντρικής Μακεδονίας)

Έρευνα γεωθερμικού πεδίου της ευρύτερης περιοχής της λίμνης Κερκίνης και προτάσεις αξιοποίησής του

Εκτίμηση της Τρωτότητας των υπόγειων υδάτων στη ρύπανση στον προσχωματικό υδροφόρα της Μυγδονίας λεκάνης απορροής

Τα τρηματοφόρα ως δείκτες οικολογικής ποιότητας στην περιοχή της νήσου Ρόδου

Εκτίμηση της οικολογικής ποιότητας του ποταμού Χαβρία το 2011

Εκτίμηση οικολογικής ποιότητας ποταμών της νήσου Σαμοθράκης για το έτος 2011 σύμφωνα με την Οδηγία 2000/60/ΕΚ

Οικολογική ποιότητα και συνθήκες τροφοδοσίας νερού στη λίμνη Βεγορίτιδα

Οικολογική ποιότητα και διαχείριση υδάτων σε επίπεδο λεκάνης απορροής

Διαχρονική εξέλιξη της ποιοτικής κατάστασης των νερών του Θερμαϊκού κόλπου

Μελέτη του υδρολογικού κύκλου της λεκάνης απορροής της λίμνης Κορώνειας με μεθόδους ιστοπικής γεωχημείας

Διερεύνηση Παράκτιας Ιζηματομεταφοράς στο Κόλπο Ιερισσού Χαλκιδικής

82 Internship Centers, Institutions,  
Ministries, Private companies

70 Case studies

70 Master Theses

>30 congresses

>10 scientific articles

>5 chapters in books

10 students follow PhD studies

During the 8 years

**Erasmus/Mundus incoming students for an internship at IPSP  
or for the whole study programme  
and outgoing students from the IPSP for their internship at European Institutions**

✓ 7 incoming students from Europe

(Universitat Autònoma de Madrid, University of Amsterdam etc)

✓ 2 MUNDUS incoming students (Bangladesh+China)

✓ 2 outgoing students from the IPSP to European Institutions

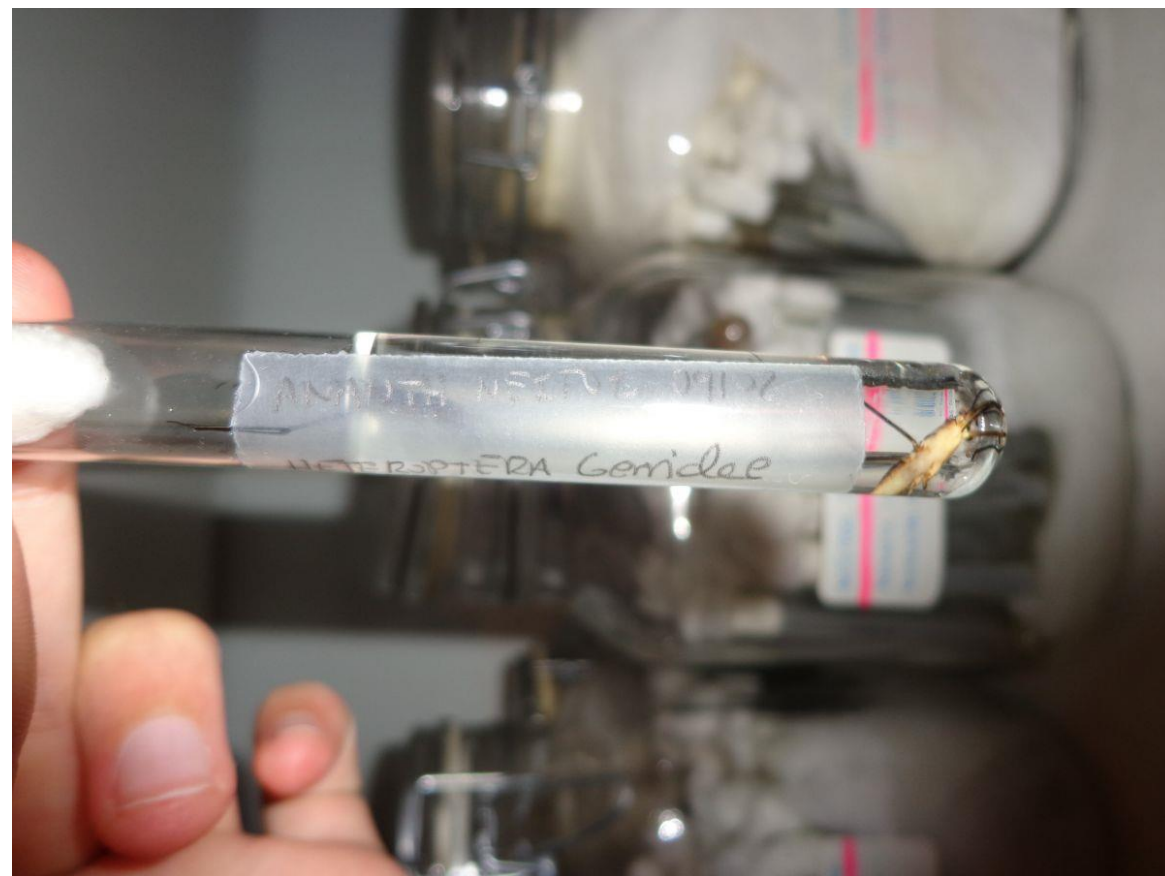


# Field & laboratory work





# MUSEUM MATERIAL OF BENTHIC MACROINVERTEBRATES (MuMaBeMa)







ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ



Thank you for your attention

