

CHRISTOS N. KALFAS
Dr. CIVIL ENGINEER - MATHEMATICIAN
ASSISTANT PROFESSOR
CIVIL ENGINEERING FACULTY, DEMOCRITUS UNIVERSITY
OF THRACE

CURRICULUM VITAE

- BIO
- STUDIES
- TEACHING, PROFESSIONAL AND RESEARCH WORK
- ANALYSIS OF SCIENTIFIC PUBLICATIONS

XANTHI, 2012

CONTENTS

1.	Brief Curriculum Vitae	5
2.	Foreign Languages	6
3.	Teaching Experience	7
3.1	Graduate courses	7
3.2	Postgraduate courses	8
4.	Doctoral Theses	8
5.	Postgraduate Theses	10
6.	Dissertations	10
7.	Research Projects	10
8.	Books – Notes	11
8.1	Books	11
8.2	Notes	12
9.	Seminars - Lectures	12
10.	Conferences	13
10.1	Participation in Conferences	13
10.2	Conference Organisation	14
10.3	Editing of Conference Proceedings	14
11.	Participation in Societies	14
12.	Participation in Committees	15
13.	Participation in Committees for the selection of Members of Teaching and Research Staff	15
14.	Professional Work	15
14.1	Design of works	15
14.2	Propositions and Preliminary Designs for Various Projects	18
14.3	Technical Consultant for the Implementation of Projects	19

14.4	Expert Reports	19
15.	List of Scientific Publications	19
15.1	Doctoral Thesis	19
15.2	Publications in International Magazines	19
15.3	Papers for Judged Conferences	20
15.4	Articles in Greek Magazines	26
16.	Publication References	27

1. BRIEF CURRICULUM VITAE

Surname : **KALFAS**

Name : **CHRISTOS**

Father's Name : NIKOLAOS

Place of Birth : Drama, Greece

Date of Birth : 4 November 1947

Family Status : Married. Father to 2 boys, aged 20 and 24.

1953 - 1959 : Iliokomi Primary School, Prefecture of Serres

1959 - 1965 : 2nd Boys' Secondary School of Thessaloniki

1965 -1970 : University studies in the Mathematics Dept. of the Physics/Mathematics Faculty of the Aristotle University of Thessaloniki.

1970 : Degree in Mathematics

1970 - 1972 : Military service as Reserve Officer in the Greek Mechanised Infantry Regiment.

1973 -1974 : Hourly-paid teacher of Mathematics in the State Technical Schools of Komotini, Greece.

1974 - 1991 : Assistant to the Seat of Technical Mechanics and later in the Department of Design and Construction of Construction Works of the Civil Engineering Faculty of the Democritus University of Thrace.

1981 -1982 : Sabbatical, research work on topics of Biomechanics at the University of Toledo, Ohio, USA, under the supervision of Prof. D. Raftopoulos.

1984 -1989 : University studies, post-sectional examinations at the Dept. Of Civil Engineers of the Democritus University of Thrace Polytechnic School.

1989 : Degree in Civil Engineering and Professional License by the Technical Chamber of Greece.

1987 - 1991 : PhD thesis at the Laboratory of Metallic Structures of the Democritus University of Thrace Polytechnic School.

- 1991 : Doctor of the Civil Engineering Department of the Democritus University of Thrace Polytechnic School.
- December 1991 : Elected Permanent Lecturer in the Civil Engineering Department of the Democritus University of Thrace on the subject of Metallic and Composite Structures.
- 1992 - 1999 : Permanent Lecturer in the Department of Design and Construction of Construction Works of the Civil Engineering Department of the Democritus University of Thrace (Laboratory of Metallic Structures).
- April 1999 : Elected Permanent Assistant Professor in the Civil Engineering Department of the Democritus University of Thrace on the subject of Metallic Structures emphasized on Composite Structures.
- 1999 - 2009 : Permanent Assistant Professor in the Sector of Construction of the Civil Engineering Department of the Democritus University of Thrace (Laboratory of Metallic Structures).
- October 2009 : Elected Associate Professor in the Department of Civil Engineering of the Democritus University of Thrace on the subject of Metallic Structures and Composite Structures.
- October 2009 - today : Associate Professor in the Sector of Construction of the Civil Engineering Department of the Democritus University of Thrace (Laboratory of Metallic Structures).
- September 2011 - today : Director of the Laboratory of Metallic Structures of the Democritus University of Thrace.

2. FOREIGN LANGUAGE

I am proficient in writing, speaking and reading in the English language.

3. TEACHING EXPERIENCE

3.1. Graduate Courses

a) As Assistant Professor

My teaching contribution as Assistant Professor for the Seat of Technical Mechanics and later in the Sector of Design and Construction of Construction Works consists of my participation in the form of teaching exercises and theoretical sections, writing notes and teaching literature, administering examinations, organizing and administering laboratory exercises, etc., in the context of teaching the following modules at the Department of Civil Engineering of the Democritus University of Thrace:

During the years 1974-1991

Mechanics of Rigid Body I

Mandatory module of the 1st semester (5 teaching hours)

Mechanics of Rigid Body II

Mandatory module of the 2nd semester (4 teaching hours)

Prior to the introduction of semesters, the two aforementioned modules comprised the module of **Technical Mechanics**, which was taught in the 1st year of studies. I also participated in teaching this module to the 1st year students of the Electrical Engineering Department of the Democritus University of Thrace during the years 1975-1979.

During the years 1979-1981

Theory of Elasticity and Strength of Materials

Mandatory module of the 2nd year of studies.

During the years 1978-1980 and 1982-1983

Experimental Strength of Materials

Mandatory module of the 3rd year of studies.

During the years 1989-1991

Composite Structures

Optional module of the 2nd year of studies.

b) As Lecturer, Assistant Professor and Associate Professor (independent teaching work)

Since the day of my induction as a Lecturer and until today, I have been assigned, either independently or in association, with teaching the following modules of the Civil Engineering Department of the Democritus University of Thrace:

1. **Introduction to Steel Structures**

Core module of the 7th semester (4 teaching hours)

2. **Composite Structures**

Optional module of the 9th semester (4 teaching hours)

3. **Metallic Structures II**

Mandatory direction module of the 8th semester (4 teaching hours)

4. **Theory of Elastic Stability**

Optional module of the 6th semester (3 teaching hours)

Since the day of my induction as a Lecturer and until the 2001-2002 academic year, I was assigned, either independently or in association, with teaching the following modules of the Civil Engineering Department of the Democritus University of Thrace:

1. **Steel Bridges.**

Mandatory direction module of the 9th semester (5 teaching hours)

2. **Timber Structures.**

Optional module of the 8th semester (3 teaching hours)

Also, during the 1991-1992 academic year, I was assigned with teaching as an Associate Professor the following modules of the Civil Engineering Department of the Democritus University of Thrace:

1. **Mechanics of Rigid Body I**

Mandatory module of the 1st semester (5 teaching hours)

2. **Mechanics of Rigid Body II**

Mandatory module of the 2nd semester (4 teaching hours)

3.2. **Postgraduate Courses**

As Assistant Professor and Associate Professor

Since the introduction of the Postgraduate Civil Engineering Department “New Materials and Technologies in the Design of Reinforced Concrete Constructions”, I have been assigned with teaching the following module:

1. **Special Topics on Joints (Composite – Steel Structures)**

Module of the spring semester (3 teaching hours)

4. **DOCTORAL THESES**

a) As Supervisor

I have participated as supervisor in the three-member supervising committees of the following doctoral theses:

- “*Behaviour of Joints between hollow sections – Experimental study*”, by Civil Engineer Dr. A. Christitsas (completed).
- “*Behaviour of bolted joints subjected to cycling loading – Experimental study*” by doctoral candidate Civil Engineer Mr. D. Pachoumis (completed – Mr. Pachoumis has been awarded his Doctorate).
- “*Simulation of composite structural elements with steel structural elements for their analysis*”, by doctoral candidate Civil Engineer Mrs. A.

Marinopoulou (completed – Mrs. Marinopoulou has been awarded her Doctorate at an advanced stage of development).

- “*Experimental and analytical investigation of the behaviour of RBS bolted joints under cycling load – Experimental study*”, by doctoral candidate Civil Engineer Mr. Ch. Sofias (currently at advanced stage of development).
- “*Beam to Column joints with hollow sections*”, by doctoral candidate Civil Engineer Mr. V. Kampakas (currently at an early stage).
-

b) As Member of the Consulting Committee

I have participated as a member in the three-member committees monitoring the following doctoral theses:

- “*Contribution in the calculation of the shear connection of composite structural elements*” by Civil Engineer Dr. P. Pavlidis (completed – Dr. Pavlidis has been awarded his Doctorate).
- “*Theoretical and experimental stress analysis of the femur*” by doctoral candidate Mr. M. Chliapis (discontinued).
- “*Investigation of the unelastic behaviour of the shear connection of composite elements*” by doctoral candidate Civil Engineer Mr. L. Mourikis (pending completion).

c) As Member of Assessment Committees

I have participated as a member in the 7-member assessment committees of the following doctoral theses:

- “*Contribution in the calculation of the shear connection of composite structural elements*”, by Civil Engineer Dr. P. Pavlidis.
- “*Models and spectrums of design and assessment of repaired buildings of reinforced concrete*” by Civil Engineer Dr. G. Thermou.
- “*Behaviour of Joints between hollow sections – Experimental study*” by Civil Engineer Dr. A. Christitsas.
- “*Behaviour of bolted joints subjected to cycling loading – Experimental control*” by Civil Engineer Dr. D. Pachoumis.
- “*Simulation of composite structural elements with metal structural elements for their analysis*”, by Civil Engineer Dr. A. Marinopoulou.

5. POSTGRADUATE THESES

I have participated either as a supervisor or as a co-supervisor in a large number (approximately 30) of postgraduate theses in the Postgraduate Department of Civil Engineering “New Materials and Technologies in the Design of Reinforced Concrete Constructions”. These were mostly research project emphasizing experimental

control. Some of the projects after further processing have been published as articles presented at scientific magazines and conferences.

6. DISSERTATIONS

I have participated either as a supervisor or as an associate supervisor in a large number (approximately 130) of dissertations of undergraduate students, with topics pertinent to the field of Steel and Composite Constructions. Some of these dissertations were preliminary studies for the proposition of projects in the town of Xanthi, Greece and its wider region. A considerable number of the dissertations was related to experimental studies.

It should be noted that a number of dissertations has received awards by the Technical Chamber of Greece as well as the Society for Metal Construction Research. Also, a recent dissertation was awarded first place by the ROBOBAT software company.

7. RESEARCH PROJECTS

I have participated in the following research projects:

- *Test of Mechanical Properties of Aluminium Alloys*
Scientific director.
Funded in whole by M.A.G. PLC.
- *Research of modern capabilities for sheltering large spaces – Application at the Indoor Sports Centre of the Municipality of Xanthi, Greece*
Member of the research team
Funded in whole by the Municipality of Xanthi, Greece
- *Cultural Centre of the Municipality of Xanthi*
Member of the research team
Funded in whole by the Municipality of Xanthi, Greece.
- *Broadcast of Wind Measurements*
Member of the research team
Funded in whole by the Special Programme of Thrace and the Democritus University of Thrace.
- *Construction of Submersible Vehicle for Underwater Research and Measurements*
Member of the research team
Funded by the Special Programme of Thrace and the Democritus University of Thrace
- *Development of Individual Osteosynthesis and Arthroprotheses (D.IN.OS.A.)*
Member of the research team and director of the project on behalf of the Laboratory of Metallic Structures, which was the main implementation carrier.

Funded by the General Secretariat of Research and Technology in the context of the programme STRIDE-HELLAS.

- *Investigation into programming the regulatory plan and facilities of the Democritus University of Thrace.*
Member of the Democritus University of Thrace research team.
Funded by the Special Thrace Programme and the Democritus University of Thrace.
- *Determination of the behaviour of shear connection with modern analytical methods.*
Scientific director of the project.
Funded by the Engineers' and Public Works Contractors' Pension Fund.
- *Extension of research into simulation and analysis of composite beams and joints with finite elements.*
Scientific director of the project
Funded by the Engineers' and Public Works Contractors' Pension Fund.

8. TEACHING LITERATURE - NOTES

8.1. Teaching Literature

- 1. E.E. Gdoutos, Ch. N. Kalfas, "Mechanics of Rigid Body. A. Statics - Examples", Volume I, Xanthi, 1981, 558 pages.**
Includes the chapters: Force and Moment, Equilibrium –Reactions, Graphical Methods, Girders, Trusses.
- 2. E.E. Gdoutos, Ch. N. Kalfas, "Mechanics of Rigid Body. A. Statics – Examples ", Volume II, Xanthi, 1982, 769 pages.**
Includes the chapters: Internal Forces and Moments, Wires and Chains, Centres of Gravity, Friction. Also includes the annexes: General Worked Examples, Electronic Calculation of Mesh Bodies.
- 3. E.E. Gdoutos, Ch. N. Kalfas, "Principles of Rigid Body Statics", Volume I, Xanthi, 1985, 479 pages.**
- 4. E.E. Gdoutos, Ch. N. Kalfas, "Principles of Rigid Body Statics", Volume II, Xanthi, 1985, 492 pages.**
- 5. Ch. N. Kalfas, "Steel Constructons, Volume I. Dimensioning of Structural Steel Elements in Accordance with Eurocodes."**
- 6. Ch. N. Kalfas, "Steel Constructions, Volume I-A. Dimensioning of Structural Steel Elements in Accordance with Eurocodes", Worked Examples.**

8.2. Student Notes

1. Ch. N. Kalfas, *"Dimensioning of Structural Steel Elements in Accordance with EC 3."*

Includes the curriculum of the module "Introduction to Metallic Structures" of the 7th semester of the Civil Engineering Department of the Democritus University of Thrace.

2. Ch. N. Kalfas, *"Examples and Applications on Steel Element Joints in Accordance with EC 3."*

Includes the curriculum of the module "Metallic Structures II" of the 8th semester of the Civil Engineering Department of the Democritus University of Thrace..

3. Ch. N. Kalfas, *"Notes on the Theory of Elastic Stability."*

Includes the curriculum of the module "Theory of Elastic Stability" of the 6th semester of the Civil Engineering Department of the Democritus University of Thrace.

9. SEMINARS - LECTURES

In order to inform Civil Engineers on the application of the new Eurocodes on Steel Structures, I was rapporteur and lecturer in various seminars, among which are the following:

- Technical Chamber of Greece Seminar, Eastern Macedonia Department, Drama, October 1992.
- Technical Chamber of Greece Seminar, Eastern Macedonia Department, Kavala, June 1995.
- Technical Chamber of Greece Seminar, Thessaly Department, Larisa, March 1996.
- Technical Chamber of Greece Seminar, Thessaly Department, Trikala, March 1996.
- Technical Chamber of Greece Conferences, Department of Eastern Macedonia, Kavala, May 1996.
- Technical Chamber of Greece Conferences, Thrace Department, Komotini, May 1996.
- Technical Chamber of Greece Conferences, Thrace Department, Orestiada, May 1996.

I was also coordinator of the following seminar, subsidized by the National Documentation Centre:

- Steel Constructions and Welding – Modern Technology, Xanthi, October-December 1992.

I was also main coordinator of the following conference conducted to inform Civil Engineers and promote Composite Structures:

- EC 4 Seminar – Composite Structures, Larica, March 2003 (Organised by the Laboratory of Metallic Structures of the Democritus University of Thrace and the Thessaly Department of the Technical Chamber of Greece).
- Conference on Composite Structures, Athens, 2003 (organized for the technical workforce of the Greek Public Power Company).

10. CONFERENCES

10.1. Participation in Conferences

1. VIII International Scientific Technical Conference : Metal Structures, Gdansk, 1989 (including presentation of project).
2. IABSE Symposium Mixed Structures including New Materials, Brussels, 1990 (including presentation of project).
3. IABSE Seminar Composite Structures and EC 4, Brussels, 1990.
4. IABSE Conference Structural Eurocodes, Davos - Swiss, 1992.
5. Fourth International Conference on Space Structures, Guildford, Surrey - United Kingdom, 1993 (including presentation of project).
6. Workshop Biomechanik : Adaptive bone-remodeling in hip endoprosthesis, Jullich, Aachen - Germany, 1994 (including lecture)
The Workshop was organised by Fachhochschule Aachen, the Laboratory of Metallic Structures of the Democritus University of Thrace and the company FEHLING.
7. 9th International Conference : Metal Structures, Krakow - Poland, 1995 (including presentation of article).
8. IABSE Conference Composite Construction - Conventional and Innovative, Innsbruck - Austria, 1997 (including presentation of article).
Conference organisers: IABSE, CEB, CIB, ECCS, FIP, RILEM, ASCCS.
9. 3rd National Conference of Metallic Structures, Metallic Structures Research Society, Thessaloniki, 1998 (including presentation of articles).
10. 4th National Conference of Metallic Structures, Metallic Structures Research Society, Patras, 2002 (including presentation of articles).
11. 5th National Conference of Metal Constructions, Metal Construction Research Society, Xanthi, 2005 (including presentation of articles).
12. 6th National Conference of Metallic Structures, Metallic Structures Research Society, Ioannina, 2008 (including presentation of articles).
13. 7th National Conference of Metallic Structures, Metallic Structures Research Society, Volos, 2011 (including presentation of articles).
14. IABSE Symposium Responding to Tomorrow's Challenges in Structural Engineering, Budapest, 2006.

10.2. Conference Organisation

- 5th National Conference of Metallic Structures, Metallic Structures Research Society, Xanthi, 2005.
Member of the Scientific and Organizing Committee and basic director of organization together with Professor E. Galousis.
98 original papers were presented in the Conference, which was attended by more than 350 participants and 500 students. The Conference included lectures by scientists both from Europe as well as the Balkan peninsula.
It was considered the most successful and well-attended Conference ever organized by the Metallic Structures Research Society.
- 6th National Conference of Metallic Structures, Metallic Structures Research Society, Ioannina, 2008
Member of the Scientific Committee
- 7th National Conference of Metallic Structures, Metallic Structures Research Society, Volos, 2011.
Member of the Scientific Committee

10.3. Supervision of Conference Proceedings Publication

I participated as an editor along with professors E. Galousis and I. Ermopoulos, Professor of the National Technical University of Athens and President of the Metallic Structures Research Society, in the three-member committee overseeing the two volumes of Minutes of the 5th National Conference of Metal Constructs, organized by the Democritus University of Thrace, the Metal Construction Research Society and the Technical Chamber of Greece (Xanthi, 2005).

11. PARTICIPATION IN SOCIETIES

- Member of the Technical Chamber of Greece.
- Member of the Greek Association of Civil Engineers.
- Member of the Metallic Structures Research Society.
- Member of the International Association for Bridge and Structural Engineering (IABSE)
- Member of the Association for International Cooperation and Research in Steel-Concrete Composite Structures (ASCCS)
- Delegate of the Laboratory of Metallic Structures, which is a corporate member of Steel Construction Institute (SCI)

12. PARTICIPATION IN COMMITTEES

Within the context of my university duties, I have participated in various University Committees, such as committees for public adjudications, project evaluation committees, acceptance committees for scientific and other equipment, etc. I have also participated in the University curriculum committee of the Department of Civil Engineers.

In view of that, I would like to stress my participation in the following committees:

- Member of the Special Interdisciplinary Committee of the Postgraduate Department “New Materials and Technologies in the Design of Works from Reinforced Concrete”.
- Member of the Sectional Examinations for the 2005-2006 academic year.

Outside the university, I have participated in project evaluation committees for for several adjudications by the Municipality of Xanthi.

I should also mention my continuous participation, either as President or as a member, in the examination committees for the issuing of professional licences for Civil Engineers by the Eastern Macedonia department of the Technical Chamber of Greece.

13. PARTICIPATION IN COMMITTEES FOR THE SELECTION OF MEMBERS OF TEACHING AND RESEARCH STAFF

I am a participating member of the 3-member Rapporteur Committee for the seat of Assistant Professor in the Sector of Design and Construction of Structural Works of the Department of Civil Engineering of the Democritus University of Thrace with the subject of “Metallic Structures – Spatial Structures”.

14. PROFESSIONAL WORK

14.1. Study Design

My professional activity consists mostly of my participation either as the main designer or technical consultant in the study of various works, among which I indicatively mention the following:

a) Building Works

- Design of a steel watchtower with height of 16 meters in the zone of responsibility of the 4th Military Corps.
- Design of a residential building in Augsburg (Germany) with special composite constructions for the parking areas.
- Design of 10 steel buildings in the zone of responsibility of the 4th Military Corps.
- Design of a 1700 m² building in the zone of responsibility of the 3rd Military Corps (Eleftheroupolis).

- Design for the reconstruction of a traditional building (tobacco warehouse) in Kavala.
- Design studies for the Cultural Centre of the Municipality of Xanthi.
- Structural design for the project “Relocation of the 316 Technical Infantry Corps – Complex of Repair and Maintenance Buildings” in Vaniano, Xanthi for the 732 Directorate of Military Works.
Large-scale steel construction with special demands and budget of €16,000,000.
- Design of a three-storey building in the area of Kavala with steel-concrete composite structure for industrial and professional use.
- Design of the Icarus School Laboratory in Dekeleia for the Civil Aviation Works authority, with a steel construction.
- Design of a shopping mall in Larisa with steel-concrete composite construction.
- Design of a two-storey residence in Kardina, Prefecture of Thessaloniki with a fully metal frame.
- Design of a two-storey house in Peraia, Prefecture of Thessaloniki with a fully metal frame.
- Design of a two-storey house in the community of Chortiatis, Prefecture of Thessaloniki with a fully metal frame.
- Design of a multi-storey building of entertainment venues in Komotini with a fully metal frame.
- Design of the project “Reforming of the Entrance Area of the Archaeological Site of Avdira, Xanthi”.
This included studies for buildings and shelters of special architectural demands with steel frames.

b) Bridgeworks

- Design of a pedestrian steel bridge in the community of Melivia, Xanthi.
- Design of a suspended pedestrian steel bridge in Satres for the Prefecture of Xanthi.
- Design of a steel bridge at the location of Koumtsoukovo, between Echinis and Satres for the Municipality of Myki.
- Design of a steel bridge at the exit of the Echinis community for the Municipality of Myki.
- Design of a pedestrian steel bridge in the community of Ferres, Prefecture of Evros.
- Design of a pedestrian steel bridge in the community of Myki for the Municipality of Myki.
- Design studies for the work “Beautification and Promotion of History of the Echinis Fortress – Construction of Steel Bridge and Access Road to the Fortress” for the 732 Directorate of Military Works.

This included the design for a steel bridge suspended from arched steel pipes.

c) Sports Works

- Design and execution supervision of the steel canopy for the bleachers of the Xanthi Sports Club football field in Xanthi..
This work is referred to in the paper P1, published in the journal Steel Construction Today.
- Design and execution supervision of the construction of bleachers on the south side of the Xanthi Sports Club football field in Xanthi.
- Design Studies for the Indoor Sports Centre of the Municipality of Xanthi.
This project includes the design of a particularly large-scale steel roof of 56-metre span.
The steel roof is referred to in the paper S.13, presented at the 3rd National Conference for Metallic Structures (Thessaloniki, 1998).
- Design of the Municipal Stadium of Karditsa roof cover.
This project includes the design of a 15.85-metre long cantilever beam.
This work is referred to in the paper S.22, presented in the 5th National Conference for Metal Construction (Xanthi, 2005)
- Design of the Doxa Football Club Stadium roof cover in Drama.
Work with special demands due to circumstances and ground qualities.
Cantilever girder length: 19.50 m.
- Design Studies for the completion of the Indoor Sports Centre of the Municipality of Servia.
Work with a large number of steel construction components, among which a steel roof with an span of 36.5 meters.
- Design of the Indoor Swimming Pool for the Municipality of Tyrnavos, which includes the design of a steel roof of dimensions 39x54 meters.
- Design of the Indoor Sports Centre of Karditsa.
This project includes a numerous of steel structures with very high architectural demands.

d) Various Works

- Structural design of various steel structures for the Public Power Company plan in Komotini.
- Design of the steel canopy for the 2nd High School of Xanthi.
- Design of the steel canopy for the yard area of the 1st High School of Xanthi.

14.2. Propositions and Preliminary Designs for Various Projects

I have made propositions and designs at a stage of final study or even application study for various works in Xanthi and other areas, which are at a planning stage. Some of these propositions arose from the demand of the related authorities, while others from personal initiatives for meeting observed local needs. It should be noted that a number of these studies were the subject of dissertations by graduate students at the Laboratory of Metallic Structures and were then expanded and completed, thus acquiring their final form. This sector includes among others:

- Multi-storey car park with 550 parking spaces for the Municipality of Xanthi (steel-concrete composite construction).
- Multi-storey car park with 300 parking spaces for the Municipality of Drama (steel-concrete composite construction).
- Multi-storey car park with 500 parking spaces for the Municipality of Komotini (steel-concrete composite construction).
- Steel pedestrian bridge for crossing railway tracks in the community of Nikiforos, Prefecture of Drama.
- Steel flag post with a height of 40 meters for a 20x30 m. flag in Didymoteicho, Prefecture of Evros.
- Buildings of shelter workshops for persons with special needs in Xanthi.
- Proposition – study for the construction of a complex of 3 suspended pedestrian bridges with large spans for the connection of Greece, Bulgaria and Turkey with the isle of the river Evros, where their borders meet.
This work is referred to in the paper S.17 published in the Proceedings of the OTUA International Symposium “Steelbridge 2004” (Millau – France, 2004).
- Proposition – study for the construction of suspended pedestrian bridges bypassing the railway tunnels and the restoration of the pedestrianized area of the Nestos narrows.
- Steel bridge on existing piers for an entertainment area at the Kossynthos river in the town of Xanthi.
- Indoor Sports Centre for the community of Nikiforos, Prefecture of Drama.
- Suspended steel pedestrian bridge with large spans in the community of Sminthi, Prefecture of Xanthi.
- Design study of a roof covering the Kavala Swimming Pool.
- Steel bleachers system with canopy in Diomedeia, Prefecture of Xanthi.
- Suspended steel pedestrian bridge for the Municipality of Larisa.

14.3. Technical Consultant for the Implementation of Projects

As a Technical Consultant for the Municipality of Xanthi, I have offered my services in the implementation of the construction of the Indoor Sports Center of the Municipality of Xanthi.

14.4. Expert Reports

I have been the consulting expert for failures or evaluations of strength capacities in the following cases:

- Investigation into the reasons for the collapse of a steel drying silo for agricultural products of the factory DIMITRA in the area of the Alexandroupoli Airport (as assigned by the Technical Chamber of Greece).
- Assessment of strength capacity of the metal roof of the paper factory and paper pulp storage silo on the plants of SOFTEX in Drama (as assigned by the Technical Chamber of Greece).
- Investigation into the reasons for the collapse of metal sliding door leading to the death of a spectator at the football field of SKODA XANTHI FOOTBALL CLUB in Pigadia, Xanthi (as assigned by the Public Prosecutor of Xanthi).

15. LIST OF SCIENTIFIC PUBLICATIONS

15.1. Doctoral Thesis

Α.1 Chr. Kalfas

“Study on the Steel-Concrete Composite Beam Rigidity”

Phd Thesis, Democritus University of Xanthi Polytechnic School, Xanthi, 1991.

15.2. Publications in International Magazines

II.1 Chr. Kalfas

“Construction of a Triangular-section Truss for a Sports Stadium”

Journal Steel Construction Today, 1988, Vol. 2, pp.79-80

II.2 Chr. Kalfas, P. Pavlidis and Ev. Galoussis

“Inelastic Behaviour of Shear Connection by a Method Based on FEM”

Journal of Constructional Steel Research, 1997, Vol. 44, pp.107-114

II.3 Marinopoulou A.A., Balopoulos V.D. and Kalfas C.N.

“Simulation of Partially Encased Composite Steel-Concrete Columns with Steel Columns”

Journal of Constructional Steel Research, 2007, Vol. 63, issue 8, pp.1058-1065

II.4 Christitsas A.D., Pachoumis D.T., Kalfas C.N. and Galoussis E.G.

“FEM Analysis of Conventional and Square Bird-Beak SHS Joint Subject to in-plane Moment – Experimental Study”

Journal of Constructional Steel Research, 2007, Vol. 63, issue 10, pp.1361-1372

II.5 Kalfas C.N., Marinopoulou A.A., Balopoulos V.D. and Galoussis E.G.

“General Method for Simulating Composite Steel-Concrete Columns with Purely-Steel Columns”

submitted for publication to Journal of Constructional Steel Research, 2007, (under review)

II.6 D.T. Pachoumis, E.G. Galoussis, C.N. Kalfas and A.D. Christitsas

“Reduced beam section moment connections subjected to cyclic loading: Experimental analysis and FEM simulation”

Engineering Structures, 2008, Vol. 31, pp.216-223)

15.3. Papers for Judged Conferences

Σ.1 Chr. Kalfas and Ev. Galoussis

“On the Contribution of the main Parameters Affecting the Deformability of Composite Beams”

Proceedings VIII International Scientific Technical Conference : Metal Structures, Gdansk, 1989, Vol. 4, pp. 86-95

Σ.2 Chr. Kalfas, Ev. Galoussis, D. Zacharopoulos, and E. Gdoutos

“Study of the Mechanical Properties of Composite Beams”

Report IABSE Symposium Mixed Structures including New Materials, Brussels, 1990, pp. 283-284

Σ.3 D. Tzourmakliotou and Chr. Kalfas

“An Experimental Study on the Performance of Shear Connectors in the Interface between Steel and Concrete of Composite Beams”

Proceedings 3rd International Conference : Advanced Composites in Emerging Technologies, University of Patras, 1990, p.612

Σ.4 A. Liolios, E. Galoussis, Chr. Kalfas and L. Vassiliadis

“A Wilson Method Based Approach for the Seismic Analysis of Cable-braced Steel Structures”

Proceedings 6th Conference on Steel Structures, Timisoara - Romania, 1991

Σ.5 Chr. Kalfas, P. Pavlidis and D. Tzourmakliotou

“Formation of Steel-Concrete Composite Beams”

Proceedings 9th International Conference : Metal Structures, Krakow - Poland, 1995, Vol. 1, pp. 95-102

Σ.6 Chr. Kalfas, P. Pavlidis and D. Tzourmakliotou

“Finite Element Simulation and Analysis of Steel-Concrete Composite Beams”

Proceedings of the 4th ASCCS International Conference : Steel-Concrete Composite Structures, Kosice - Slovakia, 1994, pp. 548-551

Σ.7 A. Liolios, E. Galoussis and C. Kalfas

“A Numerical Approach to Seismic Frictional Interaction between Adjacent Space Structures under P-Delta Effects”

Fourth International Conference on Space Structures, Guildford, Surrey - United Kingdom, 1993

Σ.8 D. Tzourmakliotou, C. Kalfas and E. Galoussis

“The realm of Space Structures via Formex Algebra”

Proceedings of the 1st European Conference on Steel Structures EUROSTEEL '95, Athens - Greece, 1995, pp. 105-108

Σ.9 C. Kalfas, P. Pavlidis, E. Galoussis and A. Liolios

“A F.E.M evaluation of push tests for shear connectors”

Proceedings of the 1st European Conference on Steel Structures EUROSTEEL '95, Athens - Greece, 1995, pp. 227-230

Σ.10 C. Kalfas, P. Pavlidis and E. Galoussis

“An approach to simulate the push out test”

7th Nordic Steel Construction Conference '95, Malmo - Sweden, 1995

Σ.11 C. Kalfas and P. Pavlidis

“Load-Slip Curve of Shear Connectors Evaluated by FEM Analysis”

Proceedings of IABSE Conference Composite Construction - Conventional and Innovative, Innsbruck - Austria, 1997, pp. 151-156

Σ.12 P. A. Pavlidis, Chr. N. Kalfas and E. G. Galousis

“F.E.M Analysis of Shear Connection of Steel-Concrete Composite Elements”

Proceedings of the 3rd National Conference for Metallic Structures, Metallic Structures Research Society, Thessaloniki, 1998, pp. 52-57.

Σ.13 Chr. N. Kalfas, E. G. Galousis and P. A. Pavlidis

“Roof Covering for the Indoor Sports Centre of the Municipality of Xanthi”

Proceedings of the 3rd National Conference for Metallic Structures, Metallic Structures Research Society, Thessaloniki, 1998, pp. 434-440.

Σ.14 Chr. N. Kalfas

“Cost comparative study of pre-tensioned and steel-concrete composite constructions”

Proceedings of the 4th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Patras, 2002, pp 403-411.

Σ.15 E. G. Galousis, Chr. N. Kalfas and P. A. Pavlidis

“Simulation of the behaviour of steel-concrete composite beams with the method of finite elements”

Proceedings of the 4th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Patras, 2002., pp 421-428

Σ.16 E. G. Galousis and Chr. N. Kalfas

“Experimental behaviour of frame joints”

Proceedings of the 4th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Patras, 2002., pp. 489-498

Σ.17 C. Kalfas, D. Tzourmakliotou, A. Cristitsas and D. Pachoumis

“A proposal for Bridging three countries”

Proceedings of OTUA International Symposium “Steelbridge 2004”, Millau - France, 2004, pp. 23-26

Σ.18 Tzourmakliotou D. and Kalfas C.

“Disengaging Engineer’s and Architect’s from Conventional Thinking. Developing a Better Understanding of their New Role”

Proceedings of EASEC Ninth East Asia-Pacific Conference on Structural Engineering and Construction, Bali - Indonesia, 2003, EGE-4

Σ.19 A. Marinopoulou and Chr. Kalfas

“Simulation of steel-concrete composite column with steel column”

Proceedings of the 5th National Conference for Metallic Structures, Metal Construction Research Society, Volume I, Xanthi, 2005, pp. 162-169

Σ.20 L. D. Mourikis, Chr. N. Kalfas and E. G. Galousis

“Experimental study of steel-concrete composite beams”

Proceedings of the 5th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Xanthi, 2005, pp. 170-180

Σ.21 A. D. Christitsas, D. Th. Pachoumis, Chr. N. Kalfas and E. G. Galousis

“Influence of Shear in the behaviour of type X moment connections between square hollow beams”

Proceedings of the 5th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Xanthi, 2005, pp. 389-398

Σ.22 Chr. N. Kalfas, A. Raptis, L. D. Mourikis, A. D. Christitsas and D. Th. Pachoumis

“The roof covering of the western bleachers of the Sports Centre of the Municipality of Karditsa”

Proceedings of the 5th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Xanthi, 2005, pp. 109-115

Σ.23 Th. Theodoridis, D. Th. Pachoumis, A. D. Christitsas, Chr. N. Kalfas and E. G. Galousis..

“Redistribution of internal forces of a single-storey frame with semi-rigid joints”

Proceedings of the 5th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Xanthi, 2005, pp. 313-322

- Σ.24 A. A. Marinopoulou, Chr. N. Kalfas, E. G. Galousis and D. Th. Pachoumis**
“Experimental study of columns with steel-concrete composite sections and their respective purely steel sections”
 Proceedings of the 6th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Ioannina, 2008, pp. 64-71
- Σ.25 I. Z. Efthymiou, D. Th. Pachoumis, Chr. N. Kalfas, E. G. Galousis and A. A. Marinopoulou**
“Study on the behaviour of a connection between a steel-concrete composite beam and a steel column”
 Proceedings of the 6th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Ioannina, 2008,, pp. 133-141
- Σ.26 D. Th. Pachoumis, Ch. K. Zempilis, S. Ch. Dimitriadis, Chr. N. Kalfas and E. G. Galousis**
“F.E.M. analysis of RBS connection with holes of various diameters and arrangements in beam flanges”
 Proceedings of the 6th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Ioannina, 2008,, pp. 158-165
- Σ.27 D. Th. Pachoumis, Chr. N. Kalfas, E. G. Galousis, A. A. Marinopoulou and I. Z. Efthymiou**
“Experimental analysis of beam-to-column connection with Reduced Beam Section (RBS) under cycling load”
 Proceedings of the 6th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Ioannina, 2008,, pp. 184-195
- Σ.28 E. G. Tsiompanos, A. A. Marinopoulou, D. Th. Pachoumis, E. G. Galousis and Chr. N. Kalfas**
“Simulation of reinforced concrete hollow sections with purely steel sections for the resolution of local buckling problems”
 Proceedings of the 6th National Conference for Metallic Structures, Metallic Structures Construction Research Society, Volume I, Ioannina, 2008,, pp. 328-335
- Σ.29 P. D. Stefanaki, Chr. N. Kalfas, D. Th. Pachoumis and A. A. Marinopoulou**

“Non-linear dynamic analysis of ten-storey steel-concrete composite frame”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Volos, 2011, pp. 185-192

- Σ.30 A. A. Marinopoulou, Chr. N. Kalfas and D. Th. Pachoumis**
“Experimental study of hollow concrete filled tubes and their ideal purely steel counterparts”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume I, Volos, 2011, pp. 562-569

- Σ.31 V. D. Alexi, Chr. N. Kalfas, D. Th. Pachoumis and Ch. E. Sofias**

“Investigation of the influence of web plates on beam-to-column bolted joint”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Volos, 2011, pp. 77-84

- Σ.32 M. S. Detorakis, Chr. N. Kalfas, D. Th. Pachoumis and A. A. Marinopoulou**

“Study on the behaviour of hollow sections moment connections with blind bolts”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Volos, 2011, pp. 85-92

- Σ.33 P. D. Stefanaki, Chr. N. Kalfas, D. Th. Pachoumis and I. Z. Efthymiou.**

“Finite elements study on the behaviour of a welded joint between steel-concrete composite beam and steel-concrete composite or metal column”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Volos, 2011, pp. 179-186

- Σ.35 D. Th. Pachoumis, E. G. Galousis, Chr. N. Kalfas and Ch. E. Sofias**

“Experimental study on the behaviour of beam-to-column connections with Reduced Beam Sections (RBS) under cycling loading”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Volos, 2011, pp. 195-206

Σ.35 Ch. E. Sofias, Chr. N. Kalfas and D. Th. Pachoumis

“Study on the behaviour of beam-to-column bolted joints with Reduced Beam Sections (RBS) under cycling loading”

Proceedings of the 7th National Conference for Metallic Structures, Metallic Structures Research Society, Volume II, Volos, 2011, pp. 207-216

15.4. Articles in Greek Magazines

E.1 Chr. N. Kalfas

“Eurocodes – A new development in the harmonization of Structural Design Regulations and the future of Civil Engineers”

Technical Chamber of Greece – Eastern Macedonia bulletin, Issue 15, 1993, pp. 35-42

E.2 Chr. N. Kalfas

“Eurocodes– A new development in the harmonization of Structural Design Regulations and the future of Civil Engineers”

Technical Chamber of Greece – Eastern Macedonia bulletin, Issue 22, 1996, pp. 28-35

E.3 Chr. N. Kalfas

“Splices in hollow sections trusses”

Technical Chamber of Greece – Eastern Macedonia bulletin, Issue 25, 1997, pp. 37-48

E.4 Chr. N. Kalfas

“Cost comparative study of pre-tensioned and steel-concrete composite constructions”

Construction and Constructors magazine, Issue 13, July 2002, pp. 20-34

E.5 Chr. N. Kalfas

“General principles of shear connection in steel-concrete composite structures”

Metal Constructions magazine, Issue 1, December 2003, pp. 28-38

E.6 Chr. N. Kalfas

“Practical rules for the application of shear connectors in steel-concrete composite structures”

Metallic Structures magazine, Issue 3, July 2004, pp. 34-43

E.7 E. G. Galousis, Chr. N. Kalfas, L. D. Mourikis, A. D. Christitsas and D. Th. Pachoumis

“Steel-concrete composite structures”

Metallic Structures magazine, Issue 4, October 2004, pp. 42-50

E.8 A. D. Christitsas, D. Th. Pachoumis, Chr. N. Kalfas and E. G. Galousis

“Influence of Shear in the behaviour of type X moment connections between square hollow beams”

Metallic Structures magazine, Issue 3/2005, pp. 62-71

16. PUBLICATION REFERENCES

References to my papers by researchers, of which I know of the following:

a) The P.2 paper has been referenced in the following:

1. Clublely S.K., Moy S.S.J., Xiao R.Y., Shear Strength of Steel-Concrete-Steel Composite Panels. Part I – Testing and Numerical Modelling, Journal of Constructional Steel Research, 2003, Vol. 59, pp.781-794.
2. Clublely S.K., Moy S.S.J., Xiao R.Y., Shear Strength of Steel-Concrete-Steel Composite Panels. Part II – Detailed Numerical Modelling of Performance, Journal of Constructional Steel Research, 2003, Vol. 59, pp.795-808.
3. Baniotopoulos Ch. C., Sokol Z., Wald F.: *Column base connections*, v Numerical simulation of semi-rigid connections by the finite element method, COST C1 WG 6 publication, editor K.V. Virdi, Brussels, 1999, s. 32 - - 48.
4. Kirchhoff Larissa, Uma Contribuição ao Estudo de Vigas Mistas Aço-Concreto Simplesmente Apoiadas em Temperatura Ambiente e em Situação de Incêndio, Dissertação do título de Mestre em Engenharia de Estruturas, Orientador Prof. Dr. Jorge Munaiar Neto, Escola de Engenharia de São Carlos da Universidade de São Paulo, São Carlos - Brasil, 2004.
5. Tristão Gustavo Alves, Neto Jorge Munaiar, Comportamento de Conectores de Cisalhamento em Vigas Mistas Aço-Concreto com Análise da Resposta Numérica, Cadernos de Engenharia de Estruturas, São Carlos - Brasil, v. 7, n. 23, 2005, pp. 121-144.

6. Tristão Gustavo Alves, Neto Jorge Munaiar, Malite Maximiliano, Conçalves Roberto Martins, Modelagem Numérica do Ensaio Tipo “Push-out” Utilizando Conectores de Cisalhamento Flexíveis, Mecânica Computacional, eds. Idelsohn S.R., Sonzogni V.E., Cardona A., Santa Fe-Parana – Argentina, Vol. XXI, 2002, pp. 1810-1824.”

b) The S.11 paper has been referenced in the following:

1. Kim Boksun, Wright D. Howard, Cairns Roy, The behaviour of through-deck welded shear connectors: an experimental and numerical study, Journal of Constructional Steel Research, 2001, Vol. 57, issue 12, pp.1359-1380.