CTU in Prague, Faculty of Civil Engineering, Department of Concrete and Masonry Structures

7th International Conference

FIBRE CONCRETE 2013

Technology, Design, Application

DAP Hotel, Prague, Czech Republic

September 12, 2013

8:00	9:00		**Registration**
9:00	9:15		**Opening ceremony**

Session 1

9:15	9:45	**1**	FIBRE REINFORCED CONCRETE: A BRIEF REVIEW OF EXPECTATIONS AND ACHIEVEMENTS AFTER FIFTY YEARS OF DEVELOPMENT *Peter JM Bartos*
9:45	10:15	**2**	CONTRIBUTION OF FIBRES TO THE SUSTAINABILITY OF CONCRETE *Sidney Mindess*
10:15	10:30	**3**	OPTIMIZATION OF FIBER REINFORCED CONCRETE STRUCTURAL MEMBERS *Alena Kohoutková*
10:30	**11:00**		**Coffee break**

Session 2

11:00	11:15	**4**	AXIALLY LOADED CONCRETE AND REINFORCED CONCRETE ELEMENTS STRENGTHENED WITH HPFRCC *Mykolas Daugevičius*
11:15	11:30	**5**	VERIFICATION OF COMPRESSIVE STRENGTH ON DIFFERENT SIZED HSC SPECIMENS *Petr Bílý*
11:30	11:45	**6**	TESTS ON SIMPLE ELEMENTS MADE OF UHPC *Jan L. Vítek*
11:45	12:00	**7**	EXPERIMENTAL BALLISTIC LOADING OF STEEL FIBRE REINFORCED CONCRETE SLABS AND UNREINFORCED CONCRETE SLABS BY PLASTIC EXPLOSIVES PLHX 30. *Jiří Štoller*
12:00	12:15	**8**	DEVELOPMENT OF ENGINEERED CEMENTITIOUS COMPOSITES WITH NON-OILED POLYVINYL ALCOHOL FIBERS AND GRAVEL SAND *Qiannan Wang*
12:15	**13:30**		**Lunch (Hotel DAP)**

Session 3

13:30	13:45	**9**	NEW APPLICATIONS FOR STEEL FIBRE REINFORCED CONCRETE AND COMBINED REINFORCEMENT *Philipp Guirguis*
13:45	14:00	**10**	SHEAR DESIGN OF SFRC PRECAST CONCRETE GIRDERS *Tim Soetens*
14:00	14:15	**11**	NUMERICAL MODELLING OF THE PUNCHING BEHAVIOUR OF STEEL FIBRE REINFORCED SELF-COMPACTING CONCRETE FLAT SLABS *Vítor M.C.F. Cunha*
14:15	14:30	**12**	MODELING ULTIMATE LOAD CAPACITY OF STEEL FIBRE REINFORCED CONCRETE CORBELS: PART1. FORMULATION AND PART2. PARAMETRIC STUDY *Eren M. Gulsan*
14:30	14:45	**13**	FINITE-ELEMENT MODELING OF TIMBER-FIBRE CONCRETE COMPOSITE FLOOR IN FIRE *František Wald*
14:45	15:00	**14**	INVERSE ANALYSIS TECHNIQUE FOR DETERMINATION OF RESIDUAL STRESS-CRACK OPENING RELATIONSHIP OF SFRC *Adas Meskenas*
15:00	**15:30**		**Coffee break (Poster Session with Author)**

Session 4

15:30	15:45	**15**	METHODS OF CHECKING OF STEEL FIBRE DISTRIBUTION *Milan Rydval*
15:45	16:00	**16**	X-RAY INVESTIGATION OF STEEL FIBRES IN SELF-COMPACTING CONCRETE *Tomasz Ponikiewski*
16:00	16:15	**17**	FIBRE ORIENTATION PHENOMENON IN CONCRETE COMPOSITES: MEASURING AND THEORETICAL MODELLING *Marika Eik*
16:15	16:30	**18**	INFLUENCE OF TEMPERATURE ON THE ASSESSMENT OF FIBRE CONTENT AND ORIENTATION WITH THE INDUCTIVE METHOD *Sergio H. Cavalaro*
16:30	16:45	**19**	EXPERIMENTS ON FIBRE REINFORCED CONCRETE TWO-WAY SLABS *David Fall*

19:00	**22:00**	**Dinner (National Wine Bank)**

September 13, 2013

Session 5

9:00	9:15	**20**	BASALT FRP MINIBAR REINFORCED CONCRETE *Leonard Miller*
9:15	9:30	**21**	MONITORING OF CONCRETE STRUCTURES BY THE MEANS OF FIBRE-CEMENT ELEMENTS *René Čechmánek*
9:30	9:45	**22**	VARIATION OF STEEL-FIBRE CONCRETE PARAMETERS DEPENDING ON THE MIXING PROCEDURE *Smiřinský Stanislav*
9:45	10:00	**23**	VARIATION IN TENSILE BEHAVIOUR OF FIBRE REINFORCED CONCRETE *Philipp Hadl*
10:00	10:15	**24**	CRACKING OF LONGITUDINALY GFRP REINFORCED FIBER CONCRETE BEAMS *Ľudovít Naď*
10:15	10:30	**25**	RESPONSE OF CONCRETE PLATES REINFORCED WITH CARBON-BASALT-STEEL FIBRES UNDER LOADING *Roberto Capozucca*
10:30	10:45	**26**	PUNCHING SHEAR STRENGTH OF FIBROUS SELF-COMPACTING CONCRETE FLAT SLABS *J.R. Al-Feel*

10:45	**11:15**	**Coffee break**

Session 6

11:15	11:30	**27**	ANALYTICAL MODEL FOR THE GENERALIZATION OF THE BARCELONA TEST BY USING THE AXIAL DISPLACEMENT TO DETERMINE THE TOUGHNESS OF THE FRC *Pablo Pujadas*
11:30	11:45	**28**	CHARACTERIZATION OF SELF-FIBRILATING SYNTHETIC MACROFIBERS FOR CONCRETE *Renan P. Salvador*
11:45	12:00	**29**	MECHANICAL PROPERTIES OF RECYCLED PLASTIC FIBRES FOR REINFORCING CONCRETE *Shi Yin*
12:00	12:15	**30**	STEEL FIBRE REINFORCED CONCRETE PRECAST SEGMENTS FOR VERTICAL SHAFTS *Albert de la Fuente*
12:15	12:30	**31**	THEORY AND PRACTICE ABOUT FIBERS, FRC, AND APPLICATIONS *Clifford N. MacDonald*
12:30	12:45	**32**	INFORMATION ON THE PROGRESS OF NORMATIVE PROCESS FOR FIBRE-REINFORCED CONCRETE IN THE CZECH REPUBLIC *Hana Hanzlová*
12:45	13:00	**33**	EXPERIENCE WITH PRACTICAL APPLICATION OF FIBRES *Petr Herka*

13:00	**14:00**	**Lunch (Hotel DAP)**

Poster session

1 DYNAMIC AND MECHANICAL PROPERTIES OF FIBER REINFORCED ROLLER COMPACTED CONCRETE
Hisham K. Ahmed

2 EFFECT OF STEEL FIBRES ON THE DEVELOPED STRESSES IN DEFORMED HEADED BARS
Saad Al-Ta'an

3 ANALYSIS OF THE FAILURE MODE OF FRC BEAMS LOADED AXIALLY AND TRANSVERSALLY
Iva Broukalová

4 POSSIBILITIES OF SURFACE FIXING THE CONCRETE AND FIBRE REINFORCED CONCRETE ELEMENTS
Martin Tipka

5 INFLUENCE OF STEEL FIBRES ON CORROSION OF REINFORCEMENT IN CONCRETE IN CHLORIDE ENVIRONMENTS: A REVIEW
Carlos G. Berrocal

6 FIBRE ORIENTATION IN SFRC SLABS
Ana Blanco

7 MODIFIED FRACTURE ENERGY METHOD FOR FIBER REINFORCED CONCRETE
Karoly P. Juhasz

8 EVALUATION OF THE DURABILITY OF SYNTHETIC MACROFIBERS IN CEMENT MATRICES
Renan P. Salvador

9 STEEL FIBERS BOND STRENGTH IN MORTAR MATRIX
Katalin Halvax

10 UHPC JOINTS OF PRECAST ELEMENTS
Čitek David

11 STRESS-STRAIN STATE ANALYSIS OF REINFORCED CONCRETE BEAMS WITH STEEL FIBERS
Merima Šahinagić - Isović

12 SHEAR CAPACITY OF STEEL FIBER-REINFORCED ULTRA-HIGH- PERFORMANCE CONCRETE BEAMS
Raul Zagon

13 DEFORMATION PROPERTIES AND TESTING OF SYNTHETIC FIBRES
Karel Šeps

14 COMPARISON OF THREE POINT BENDING AND UNI-AXIAL TENSION TESTS
Rasmus Rempling

15 ANALYSIS OF DIFFERENCES IN THE BEHAVIOUR OF TRADITIONAL AND SELF-COMPACTING STEEL FIBRE REINFORCED CONCRETE
Lin Liao

16 RHEOLOGICAL PROPERTIES OF SELF-COMPACTING CONCRETE WITH CHOSEN STEEL FIBRES
Tomasz Ponikiewski

17 RHEOLOGICAL AND MECHANICAL PROPERTIES OF STEEL FIBRE REINFORCED SELF-COMPACTING CONCRETE IN PRECAST SLABS
Tomasz Ponikiewski

18 INFLUENCE OF SPEED LOADING ON THE STRENGTH CLASS OF SFRC BY THE FOUR-POINT TEST ARRANGEMENT
Václav Ráček

19 STUDY OF SELF-COMPACTING CONCRETES REINFORCED BY SYNTHETIC STRUCTURAL FIBRES
Alessandro Nardinocchi