Finnish-Russian University Cooperation in Telecommunications
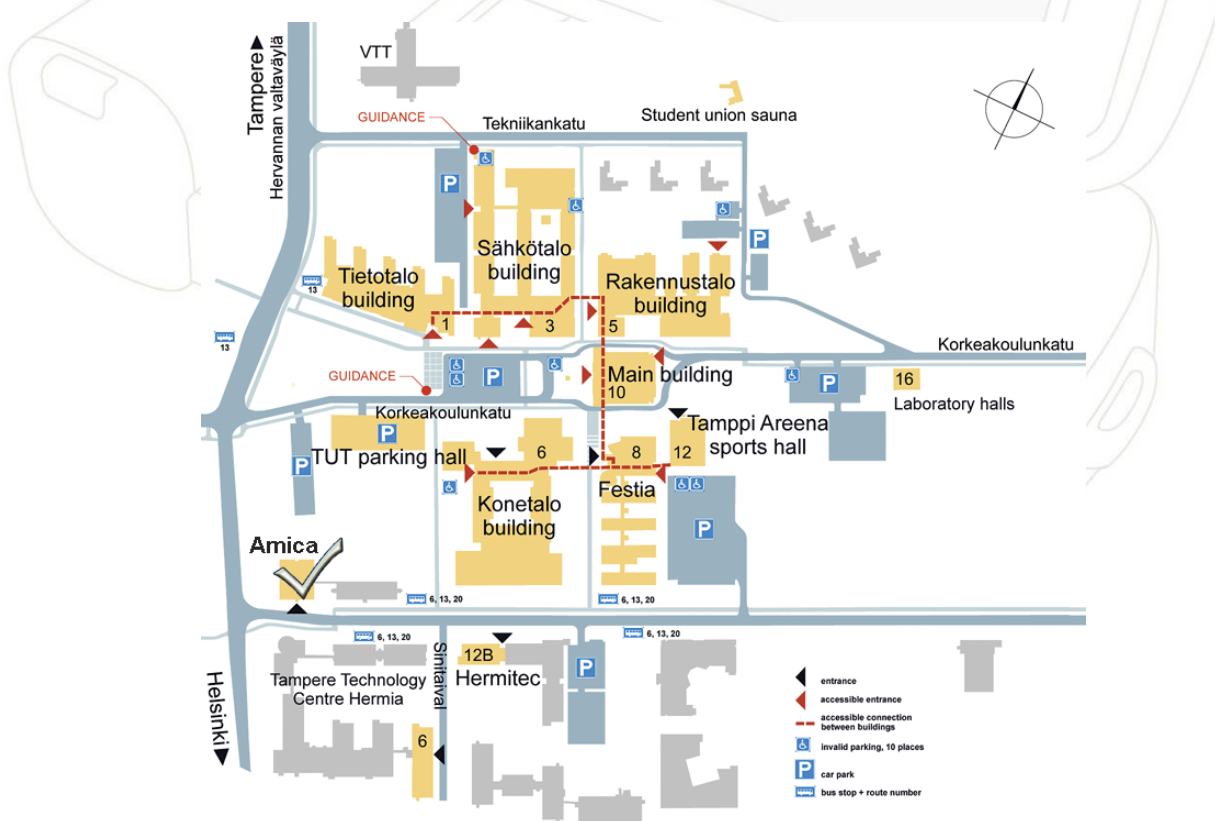# 4th FRUCT program seminar on Oct 29-31 in Tampere, Finland

October 29 (Wednesday)
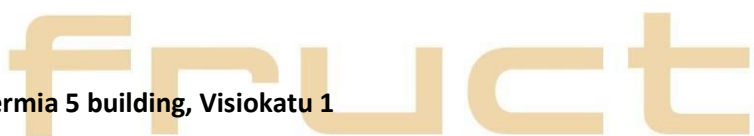**Tampere University of Technology, Korkeakoulunkatu 8**

08:30	30m	**Registration**

Session: Welcome and introduction to FRUCT and seminar participants
Room: Festia building, Auditorium Festia Pieni Sali 1
Chairman: Sergey Balandin

09:00	15m	**Official opening of the seminar, Welcome from Tampere University of Technology** (Ulla Ruotsalainen), **Nokia** (Sergey Balandin), **Symbian** (Lawrence Simpson)
09:15	30m	**FRUCT program description and status,** Sergey Balandin, Nokia Research Center, Finland
09:45	15m	**Symbian University Engagement – an overview,** Lawrence Simpson, Symbian Research Center, UK
10:00	15m	**Presentation of St.-Petersburg State University of Aerospace Instrumentation,** Ann Ukhanova, St.-Petersburg State University of Aerospace Instrumentation, Russia
10:15	15m	**Presentation of Tampere University of Technology,** Yevgeni Koucheryavy, Tampere University of Technology, Finland
10:30	15m	**Coffee-break**
10:45	15m	**Cooperation of IT-park of PetrSU with Nokia Research Center and companies of Russia and Finland,** Anton Shabaev, Petrozavodsk State University, Russia
11:00	15m	**Presentation of Southern Federal University,** Victor Kureychik, Southern Federal University, Russia
11:15	15m	**Nizniy Novgorod State University NNSU and WirelessLab: mission and collaboration,** Diana Ilina, Nizniy Novgorod State University, Russia
11:30	15m	**Overview of MIT department research activities,** Timo Hämäläinen, Jyväskylä University of Technology, Finland
11:45	15m	**Presentation of Helsinki University of Technology,** Olav Tirkkonen, Helsinki University of Technology, Finland
12:00	1h	**Lunch (Restaurant ZIP, Tietotalo building)**

Session: Wireless networks, part I
Room: Festia building, Auditorium Festia Pieni Sali 1
Chairman: Alexey Dudkov

13:00	30m	**Optimization of feedback use in wireless networks,** Olav Tirkkonen, Helsinki University of Technology, Finland
13:30	15m	**Optimizing differential CQI for MIMO with codebook based precoding,** Helka-Liina Määttänen, Helsinki University of Technology, Finland
13:45	15m	**Self-organized synchronization in wireless network,** Jiang Yu, Helsinki University of Technology, Finland
14:00	15m	**Modeling of turbo code performance,** Sergio Lembo, Helsinki University of Technology, Finland

14:15	15m	**Overview of networking research at HIIT,** Andrei Gurtov, Helsinki Institute for Information Technology, Finland
14:30	15m	**Coffee-break**

Session: <u>Open source and MAEMO; Discussion</u>
Room: Festia building, Auditorium Festia Pieni Sali 1

<div align="right">Chairman: Timofey Turenko</div>

14:45	30m	**Open source software in mobile devices,** Timofey Turenko, Nokia Research Center, Finland
15:15	45m	**Maemo and university co-operation going forward,** Tero Kojo, Nokia Devices R&D
16:00	30m	**Developing Maemo-based competencies at IT-park of PetrSU,** Anton Shabaev, Petrozavodsk State University, Russia
16:30	15m	**Open source implementation of ZigBee,** Arina Rudakova, St.-Petersburg Electrotechnical University, Russia
16:45	15m	**Approach to a problem of mesh-connectivity between XO laptops and Nokia MAEMO devices,** Arina Rudakova, St.-Petersburg Electrotechnical University, Russia
17:00	15m	**Maemo activity in SUAI,** Vitaly Petrov, St.-Petersburg State University of Aerospace Instrumentation, Russia
17:15	15m	**Demo: Open source implementation and performance measurements of wireless mesh network,** Piotr Mitoraj, Tampere University of Technology, Finland
19:00	3h	**Social event: Restaurant Amica Hermanni, Hermiankatu 1**

October 30 (Thursday)
Nokia Research Center, Hermia 5 building, Visiokatu 1

08:45	15m	**Day Agenda**

Session: Smart Spaces
Room: H5 Auditorium A156

Chairman: Alexander Sayenko

09:00	1h	**Semantic computation and the future semantic Web,** Ian Oliver, Nokia Research Center, Finland
10:00	20m	**Technology platform for AutoICT services and applications,** Timo Koski, University of Turku, Finland
10:20	20m	**Building a model of SmartCity for Saint-Petersburg,** Pavel Gonchukov, St.-Petersburg State University of Aerospace Instrumentation, Russia
10:40	20m	**Coffee-break / Stand demo**
11:00	1h	**IPSO (IP for Smart Objects),** Jose Martinez Lastra, Tampere University of Technology, Finland
12:00	20m	**Using of semantic friends for search in P2P network,** Eugeny Linsky, St.-Petersburg State University of Aerospace Instrumentation, Russia
12:20	1h	**Lunch**

Session: Mobile services and Symbian
Room: H5 Auditorium A156

Chairman: Alexey Koren

13:20	30m	**Symbian OS as a research platform – present and future,** Lawrence Simpson, Symbian Research Center, UK
13:50	20m	**Web runtime and WRT widgets,** Marko Lumivuori, Nokia
14:10	20m	**Research activities on GNSS positioning at DCE group from TUT,** Elena Simona Lohan, Tampere University of Technology, Finland
14:30	20m	**Alternative solution of the mobile medical assistant system for people with diabetes,** Valeriy Muzhikov, Pavlov Institute of Physiology of the Russian Academy of Sciences, Russia
14:50	20m	**System analyzing pedestrian movement in city environment,** Alexander Buntakov, St.-Petersburg State University of Aerospace Instrumentation, Russia
15:10	20m	**Expert control system convenience UI,** Diana Ilina, N.I. Lobachevsky State University of Nizhniy Novgorod, Russia
15:30	20m	**Aggregation protocols evolution analysis,** Diana Ilina, N.I. Lobachevsky State University of Nizhniy Novgorod, Russia
15:50	20m	**Coffee-break / Stand demo**

Session: Video for mobile devices and DTV
Room: H5 Auditorium A156

Chairman: Miska Hannuksela

16:10	1h	**Scalable video codecs,** Miska Hannuksela, Tampere Nokia Research Center, Finland
17:10	20m	**JPEG-LS standard and efficient power management for wireless video transmission,** Ann Ukhanova, St.-Petersburg State University of Aerospace Instrumentation, Russia
17:30	20m	**Effects of transmission errors on quality of audiovisual services delivered over DVB-H,** Teppo Kurki, University of Turku, Finland

October 31 (Friday)
Tampere University of Technology, Korkeakoulunkatu 6

08:45	15m	Day Agenda

Session: Embedded networks
Room: Konetalo building, Auditorium K1702   Chairman: Michel Gillet

09:00	1h	**Hardware/software co-simulation for conformance testing of embedded networks,** Michel Gillet, Helsinki Nokia Research Center, Finland
10:00	20m	**Security in embedded networks,** Elena Reshetova, Helsinki Nokia Research Center, Finland
10:20	25m	**Distributed interrupts mechanism implementation and investigation by modeling on SDL and SystemC,** Irina Lavrovskaya, Alexey Rabin, St.-Petersburg State University of Aerospace Instrumentation
10:45	20m	**Different approaches for the SystemC modeling,** Valentin Olenev, St.-Petersburg State University of Aerospace Instrumentation, Russia
11:05	15m	**Coffee-break**

Session: Forum Nokia for universities
Room: Konetalo building, Auditorium K1702   Chairman: Lawrence Simpson

11:20	1h	**Forum Nokia for universities – education and innovation to mobile platforms**, Jarmo Rintamäki, Forum Nokia. **University and developer training services,** Tony Torp, Tampere Polytechnic University of Applied Sciences
12:20	20m	**Cooperation with developers and mission of Forum Nokia tech support,** Mahbubur Rahman, Nokia
12:40	1h	**Lunch (Restaurant ZIP, Tietotalo building)**
13:40	1h	**Introduction to Symbian OS and programming on S60 platform,** Tony Torp, Tampere Polytechnic University of Applied Sciences, Finland

Session: Wireless networks, part II			**Session: Symbian training**
Room: Konetalo building, Auditorium K1702			**Room: Tietotalo building, Room B205**
		Chairman: Yevgeni Koucheryavy	Chairman: Tony Torp
14:40	20m	**Applicability of host identities in ambient networking environment**, Seppo Heikkinen, Tampere University of Technology, Finland	
15:00	20m	**Performance of host identity protocol on lightweight mobile devices,** Andrey Khurri, Helsinki Institute for Information Technology, Finland	**Symbian training: introduction for academics,** Tony Torp, Tampere Polytechnic University of Applied Sciences, Finland
15:20	15m	**Demo: HIP-based P2PSIP,** Joakim Koskela, Helsinki Institute for Information Technology, Finland	
15:35	20m	**Features of the IEEE 802.16 NS-2 extension (WINSE),** Vitaliy Tykhomyrov, Jyväskylä University of Technology, Finland	
15:55	20m	**IEEE 802.16 link adaptation mechanism,** Oleksandr Puchko, Jyväskylä University of Technology, Finland	
16:15	15m	**Coffee-break**	
16:30	45m	**Reliable packet transmission for sensor networks,** Eugeny Linsky, St.-Petersburg State University of Aerospace Instrumentation, Russia	**Symbian training (cont.),** Tony Torp, Tampere Polytechnic University of Applied Sciences, Finland

Session: Brainstorming on future of FRUCT program (round table)
Room: Konetalo building, Auditorium K1702   Chairman: Sergey Balandin

18:00	10m	**Official closing of the seminar,** Sergey Balandin, Nokia Research Center, Finland