

# NTF

**NORDIC TEST FORUM**

invites to

# TestForum 2016

*A Nordic event for exchange of experience and know-how  
within the field of production test of electronics.*

*Meet colleagues and experts, gain knowledge about trends  
and best practices in the area of test of electronics.*

Tuesday and Wednesday, November 29<sup>th</sup> and 30<sup>th</sup>, 2016

**Radisson Blu Hotel Lietuva, Vilnius, Lithuania**



**TestForum 2016 November 29<sup>th</sup> & 30<sup>th</sup> Vilnius, Lithuania**

On behalf of the Nordic Test Forum committee I would like to invite you to Vilnius to the annual NTF conference. This is the first time in NTF history we visit Vilnius, the capital of Lithuania. Vilnius contains one of the largest surviving medieval quarters in Europe and the Old Town contains almost two thousand medieval, gothic, renaissance, and baroque buildings.

TestForum 2016 has an excellent technical program, focusing on test automation, test strategies, test quality, structural test, functional test and JTAG based test.

Among the presenters, we find experts from Lithuania, Denmark, Estonia, Finland, France, Germany, Norway, UK and USA.

This year's Keynote speaker is Dr. **Vytautas Jokužis, Chief Executive Officer, UAB Elinta**. He will speak about **"Innovative products developed in Lithuania"**.

At the end of the first day, we will also have an interesting panel discussion on the topic: *"Can automation take us to new levels in test quality and efficiency?"*

The conference, the conference dinner and the mini exhibition offers a great opportunity for technical and business discussions.

On behalf of the committee, I wish to welcome you to TestForum 2016!

Yours sincerely



Knut Båtsstøløkken  
Chairman of *Nordic Test Forum*



Vilnius, Photo by Laimonas Ciūnys

## Key Note Speaker

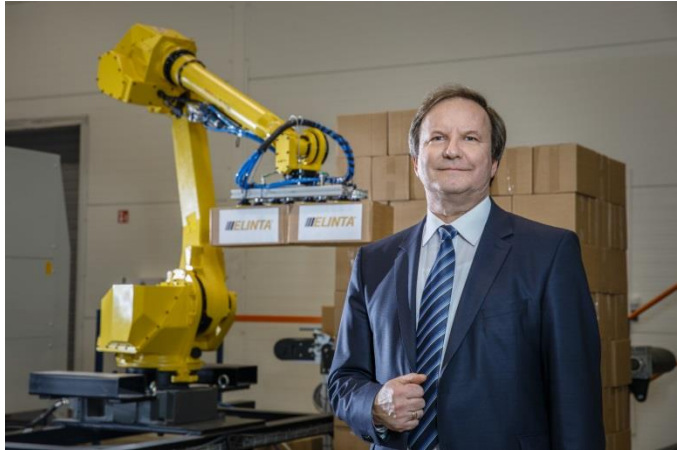
**Dr. Vytautas Jokužis**  
**Chief Executive Officer**  
**UAB Elinta**

Dr. Vytautas Jokužis is an electronics engineer and he holds a doctor degree in technology science. Vytautas is founder and CEO of high-tech company “Elinta”.

Dr. Vytautas Jokužis has graduated bachelor studies with Honors at Kaunas Polytechnic Institute Automation faculty in 1983 and defended his doctoral thesis in 2003. He was working as junior researcher from 1983 till 1991 in Automation faculty. From 1991 till these days he is CEO of company “Elinta”.

Dr. Vytautas Jokužis, because of his scientific, creative potential and excellent abilities of management has developed the high-tech company which successfully competing in an international market. His engineer’s team are proud of a wide range of inventions – from industry automation systems, 3D scanners and computerized visual systems to electric vehicle systems. “Elinta” company’s production is successfully sold in the USA, Australia, and Europe.

Dr. Vytautas Jokužis participates in science institutions activities. He is active chairman of science projects, member or chairman of bachelor and master theses qualification commission. Today Vytautas is a member of the business council of Kaunas Technology University, a member of science and teaching staff attestation commission; Kaunas technical college chairman of the board and a member of science and teaching staff attestation commission; expert in science and innovation agency.



vz.lt photo

## **Nordic Test Forum in Brief**

*TestForum* is an annual event that *Nordic Test Forum (NTF)* runs every fall/early winter. *TestForum* typically has 3 thematic areas and cover a broad balance of test and inspection.

*TestForum* has its roots back the late eighties, where it originated as an event for the Norwegian electronics industry. However, from the late part of 2001 a group of people from Norway, Sweden and Denmark established the network, *Nordic Test Forum*. Later on, this activity (including the *TestForum* event was extended to include all the Nordic countries. The language of the official presentations is English. Content and focus of the *TestForum* varies over time, but always within topic areas in focus at a given point in time.

*TestForum* has its main emphasis on issues relevant to production managers, engineers and technicians working in the fields of production, test, inspection and validation of electronics. At *TestForum* events we offer technically relevant presentations on methodology, tools, modules/instruments and available technology. The interaction between users and suppliers within the focus areas is an important asset of *TestForum*, and this balance and interaction is pursued in presentations, panel discussions, and in the planning of the events.

### **TestForum Aims at:**

- Creating and sustaining a relevant, balanced and coherent interaction between users as well as between users and suppliers of solutions for test, inspection, validation and production of electronics.
- Providing an up-to-date view on new methodologies and tools for relevant test, inspection, validation and production of electronics.
- Establishing a relevant and balanced view on equipment, systems, tools and software from tool vendors in the domain.

### **Target Audience of TestForum**

Engineers and technicians, managers and planners within the fields of electronics production and test, inspection and validation. Includes also decision makers in organizations that procure equipment, tools and systems for production and test, inspection and validation of electronics.

### **Executive Committee of TestForum event and NTF organization**

Knut Båstoløkken	Kitron AS, Norway (Chairman)
Birger Schneider	DELTA, Denmark (Treasurer)
Bjørn B Larsen	NTNU, Norway (Secretary)
Stig-Gunnar Jensen	Eltel AS, Norway
Mick Austin	JTAG Technologies Finland, Finland
Artur Jutman	Tallinn University of Technology, Estonia
Erik Larsson	Lund University, Sweden
Lars Kongsted-Jensen	EP-TeQ A/S, Denmark
Magnus Rönqvist	Syntronic Test Systems AB, Sweden
Mauri Aalto	Neste Jacobs OY, Finland
Raimedas Sodaitis	UAB Kitron, Lithuania
Bill Eklow	Associate member, USA

## Become a Member of Nordic Test Forum

If you are involved in production test, validation test, and inspection of electronics and your professional work is related to activities in the Nordic countries as a test professional, design engineer, manufacturer, supplier of solutions, consultant, etc., you may register as member of Nordic Test Forum (NTF) in order to benefit from:

- Exchange of know-how in testing
- Increased contact network in the Nordic countries
- Surveillance and information of International activities in the area of test and inspection
- Discounts at NTF seminars and TestForum events
- Membership list

Please register on the WEB page: <http://www.NordicTestForum.org>

## TestForum 2016 Local Organizer

The local organizer is:

**Raimedas Sodaitis**  
UAB Kitron  
PO Box LT 52119,  
Taikos pr. 151, Kaunas

Phone: +37037244217

E-mail: [raimedas.sodaitis@kitron.com](mailto:raimedas.sodaitis@kitron.com)

## Technical Program of TestForum 2016

### Nordic Test Forum (NTF) Annual Assembly, November 28<sup>th</sup> 2016

The NTF organization holds an annual general assembly a day before the TestForum conference. This year it will be held on **November 28<sup>th</sup> at 20:00**. The agenda and motions will be dispatched to the members in a separate mailing.

### Tuesday, November 29<sup>th</sup>, 2016

Time	Titles	Speakers or additional info
08:30-08:50	Registration	
<b>08:50-09:00</b>	<b>Welcome / Introduction</b>	Knut Båtstøløkken
<b>09:00-10:00</b>	<b>Key Note Session</b>	<i>Chairman: Knut Båtstøløkken</i>
09:00-10:00	Innovative products developed in Lithuania	Vytautas Jokužis, UAB Elinta
<b>10:00-10:30</b>	<b>Exhibitor Forum: short presentations</b>	<i>Chairman: Mick Austin</i>
10:30-11:00	Coffee Break / Exhibition	
<b>11:00-12:30</b>	<b>Session 1: Structural test and test data</b>	<i>Chairman: Birger Schneider</i>
11:00-11:30	Advanced SPI technology	Mr. Jang Woong, PARMI
11:30-12:00	Can board tester satisfy all the needs?	Lothar Diez, SPEA
12:00-12:30	Having the right data & information at the right time: Utopia or Reality?	Ignace Braem, Siemens Industry Software
12:30-13:30	Lunch	
<b>13:30-15:00</b>	<b>Session 2: Test Strategies and Test Quality 1</b>	<i>Chairman: Stig-Gunnar Jensen</i>
13:30-14:00	Complete Integration of Test and Inspection Machines for PCB Manufacturing	Mark Laing, Valor
14:00-14:30	Test Coverage 4.0: How to build a consistent design to test flow in order to deliver defect-free PCBA	Christophe Lotz, Aster Technologies
14:30-15:00	Screening out marginal defects and outliers passing functional test	Artur Jutman and Sergei Odintsov, Testonica Lab
15:00-15:30	Coffee Break / Exhibition	
<b>15:30-16:30</b>	<b>Session 3: Test automation, Robotics for test engineering</b>	<i>Chairman: Bjørn B. Larsen</i>
15:30-16:00	Automation of test: what's solutions, and how to implement it	Jacques Bonnement, Teradyne
16:00-16:30	In-line functional testing	Raimedas Sodaitis, UAB Kitron
<b>16:30-17:00</b>	<b>News from conferences</b>	<i>Chairman: Artur Jutman</i>
17:00-17:30	Fruit & Refreshments / Exhibition	
<b>17:30-19:00</b>	<b>Panel debate: "Can automation take us to new levels in test quality and efficiency "</b>	<i>Panel moderator: Birger Schneider</i>
<b>19:30</b>	<b>Dinner</b>	

Wednesday, November 30<sup>th</sup>, 2016

Time	Titles	Speakers or additional info
<b>09:30-11:00</b>	<b>Session 4: Functional test and failure analysis</b>	<i>Chairman: Stig-Gunnar Jensen</i>
09:30-10:00	PXI Digital Pattern Instrument	Armen Hakobyan, National Instruments
10:00-10:30	Easy tools for detecting pre- and post-failure parameters for corrosion analysis on printed circuit board assemblies	Vadimas Verdingovas, EC-RAT ApS
10:30-11:00	Production test considerations at small to medium volume factory. What do customers want?	Rolf Østvik, AXXE
11:00-11:30	Coffee Break / Exhibition	
<b>11:30-13:00</b>	<b>Session 5: JTAG based test</b>	<i>Chairman: Lars Kongsted-Jensen</i>
11:30-12:00	Advanced testing of prototypes and manufacturing with JTAG Embedded Diagnostic OS	Jan Heiber, Göpel
12:00-12:30	Using JTAG Functional Test in LabView to Test microprocessor or FPGA peripheral devices	Mick Austin, JTAG Technologies
12:30-13:00	IEEE1149.1 TAP accessible embedded test solutions to tackle challenges in production testing	Mika Pussinen, Nokia Networks, Oulu
13:00-14:00	Lunch	
<b>14:00-15:00</b>	<b>Session 5: Test Strategies and Test Quality 2</b>	<i>Chairman: Raimedas Sodaitis</i>
14:00-14:30	Mining the Test Data Motherlode	Ari Pihlajavesi, Predisys
14:30-15:00	How to accelerate vibration test via Fatigue Damage Spectrum	Pavel Fišer, Vibration Research
14:50-15:00	Closing Session: TestForum concluding remarks	<i>Knut Båtstøløkken Kitron</i>

## Exhibition

As usually, a mini exhibition will take place in frames of TestForum event where vendors are welcome to present their tools and methodologies related to production test. Exhibitors can make arrangements with NTF about exhibition space. If nothing special has been agreed, a table of about 60x120 cm<sup>2</sup>, as well as space for posters or similar material will be provided. Every exhibitor will be given 7-8-minute slot in the program for a brief introduction.

## Registration and hotel booking

The **Conference Fee** is EUR 450 for NTF members, EUR 250 for students and EUR 525 for others. The fee includes participation, food and refreshments from Tuesday morning to Wednesday afternoon as well as forum proceedings on the USB memory. Exhibitors pay EUR 850, which also includes the participation of a single person.

The seminar fee will be invoiced directly to the organization, from which the participant comes. In the event of cancellation after the final registration date, or in the event of failure to appear, the entire fee is still due. On request, another person from the same organization can participate instead.

The hotel rooms are booked through the seminar registration, but the room rate is paid directly by each participant to the hotel (i.e. not included in the seminar fee). **The room rate** is 92 EUR single room and 92 EUR double room per night, including breakfast.

Booking of rooms at the conference hotel is **not** mandatory for participation at the seminar.

The **registration deadline is Monday 31<sup>st</sup>, October, 2016**, in order to **guarantee hotel room**. **Registration after this date is also possible**. However, we cannot guarantee that hotel rooms are available at the conference hotel.

Registration for TestForum 2016 can be done through the NTF website by using the following link.

- <http://www.NordicTestForum.org>

Alternatively, one can contact the TestForum secretariat at

Att.: Suzanne Holte  
Tel.: +45-2088 5972  
Email: [suzanne@nordicestforum.org](mailto:suzanne@nordicestforum.org)

Please indicate, whether you register as:

- |  |         |
|--|---------|
| • NTF member   | EUR 450 |
| • A non-member   | EUR 525 |
| • A student (with valid student ID)                          | EUR 250 |
| • An exhibitor, i.e. want to exhibit in the small exhibition | EUR 850 |

Please indicate whether you need a room at the conference hotel:

- Dates of arrival and departure
- Single or double room



## Radisson Blu Hotel Lietuva, Vilnius, Lithuania

TestForum 2016 will take place at Radisson Blu Hotel Lietuva, which is situated in the center of Vilnius. Details about the hotel is at: <https://www.radissonblu.com/en/lietuvahotel-vilnius>

### Hotel address

Konstitucijos pr. 20  
LT-09308 Vilnius

### Getting to the hotel

From Vilnius Airport:

- Bus Stop – at the entrance of Airport. “3G” express bus.
- Taxi fare from Airport is about 10 Euro to Vilnius center. Don't forget to ask for a fixed price.
- 9 km, about 12 minutes by car.

From Vilnius bus/train station:

- Bus Stop – at the entrance of bus station. “1G” express bus.
- Taxi fare from bus station is about 8 Euro to Vilnius center. Don't forget to ask for a fixed price.

