# Model Based Control for Smart Forming Processes

## 12 October

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00</td>
<td><strong>Registration / Welcome drinks</strong></td>
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<tr>
<td>8:30</td>
<td>Opening (Ton van den Boogaard)</td>
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<tr>
<td>8:40</td>
<td><em>Smart Change in the Making; Transforming Forming with Control</em>, Ravi Venugopal</td>
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<tr>
<td>9:20</td>
<td><em>Model based control of product properties in metal processing: Challenges and opportunities</em>, Stephen Duncan</td>
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<tr>
<td>10:00</td>
<td><strong>Coffee</strong></td>
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<tr>
<td>10:30</td>
<td><em>Product-to-product state estimation for metal forming mass production</em>, J. Havinga, A.H. van den Boogaard</td>
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<tr>
<td>11:00</td>
<td><em>Approaches for control in deep drawing</em>, P. Fischer, D. Harsch, J. Heingärtner, Y. Renkci and P. Hora</td>
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<tr>
<td>11:30</td>
<td><em>Physical model based digital twins in manufacturing processes</em>, J. Post, M. Groen, G. Klaseboer</td>
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<tr>
<td>12:00</td>
<td><em>Influence of the elastic behaviour of a moving bolster on punch active surface: a numerical investigation</em>, F. Zgoll, T. Götte and W. Volk</td>
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<tr>
<td>12:30</td>
<td><strong>Lunch</strong></td>
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<tr>
<td>13:50</td>
<td><em>Chances and limitations of in-line measurement for automotive press shops</em>, Wolfram Volk</td>
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<tr>
<td>14:30</td>
<td><em>Recent developments in modelling for on-line setup and control</em>, Camile Hol</td>
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<tr>
<td>15:00</td>
<td><em>Physics-based simulation of laser assisted tape winding for online process control</em>, A. Zaami, I. Baran, R. Akkerman</td>
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<tr>
<td>15:30</td>
<td><strong>Coffee</strong></td>
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<tr>
<td>16:00</td>
<td><em>Systematic drawbead design for optimal process control</em>, B. Carleer, I. Burchitz and M. Stippak</td>
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<td>16:30</td>
<td><em>New bending process with superposition of radial stresses for damage control</em>, R. Meya, C. Lübbe, O. Hering and A. E. Tekkaya</td>
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<tr>
<td>17:00</td>
<td><em>Developments in process modeling for strip steering in hot strip rolling</em>, Leo Kampmeijer</td>
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<td>17:30</td>
<td><em>Experiences with the q-guard in-line control system in production</em>, J. Heingärtner, P. Fischer, D. Harsch, Y. Rencki and P. Hora</td>
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<tr>
<td>19:00</td>
<td><strong>Conference Banquet</strong></td>
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## 10th Forming Technology Forum 2017

**Model Based Control for Smart Forming Processes**

**Program**

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<table>
<thead>
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<td><em>Four steps towards fully automated forming processes</em>, Peter Groche</td>
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<td>9:20</td>
<td><em>Future needs in the development of FEM in combination with in-line process control</em>, Pavel Hora</td>
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<td>10:00</td>
<td><strong>Coffee</strong></td>
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<tr>
<td>10:30</td>
<td><em>Influence of scattering material properties on the robustness of deep drawing processes</em>, D. Harsch, J. Heingärtner, Y. Renkci and P. Hora</td>
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<tr>
<td>11:00</td>
<td><em>Closed feedback loop process control approaches and sensor evaluation for deep drawing tools with integrated piezoelectric actuators</em>, T. Bäume, W. Zorn, W. Drossel</td>
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<td>11:30</td>
<td><em>Verification of a closed loop control for deep drawing process</em>, M. Barthau, M. Liewald and C. Held</td>
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<td>12:00</td>
<td><em>Deep drawing process control using active drawbeads</em>, C. Maier, V. Paunoiu, A. Epureanu</td>
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<td><strong>Lunch</strong></td>
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<td>13:50</td>
<td><em>On feedback control of stamping and deep drawing operations</em>, Benny Endelt</td>
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<td>14:30</td>
<td><em>Data-driven inline optimization of the manufacturing process of car body parts</em>, S. Purr, A. Wendt, J. Meinhardt, K. Mölzl, A. Werner, H. Hagenah and M. Merklein</td>
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<tr>
<td>15:00</td>
<td><em>Augmented reality (ar) technology for the purpose of sheet metal forming simulation evaluation</em>, M. Lechner, R. Schulte, S. Meckler and M. Merklein</td>
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<tr>
<td>15:30</td>
<td><strong>Coffee and closure</strong></td>
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