

Arno D.C. Pronk  
Universitair Docent  
Innovative Structural Design  
E-mail: A.D.C.Pronk@tue.nl



## Aanstellingen

### Universitair Docent

Universitair Docent  
Innovative Structural Design  
Technische Universiteit Eindhoven  
Eindhoven, Nederland  
1 sep. 2013 → 21 jul. 2020

### Universitair Docent

Universitair Docent  
Innovative Structural Design  
Technische Universiteit Eindhoven  
Eindhoven, Nederland  
1 sep. 2002 → present

## Onderzoeksoutput

### Buoycrete, a light-weight concrete

Pronk, A. D. C. & visch, G., 15 sep. 2022. 15 blz.

### Ice composite research

Pronk, A. D. C., Vissers, W. & Petricică, L., 15 sep. 2022. 13 blz.

### Structural behavior and realization of a monumental ice structure in China

Pronk, A. D. C., Li, Q., Mergny, E. & Zhou, Y., 15 sep. 2022. 15 blz.

### The Ice Torch

Pronk, A. D. C., staat, V., Tissen, J. & Dicastillo, I., 15 sep. 2022. 11 blz.

### Structural Design of a Latticed Pykrete Tower

Pronk, A. D. C., Mergny, E. & Li, Q., jun. 2022, In: Structures. 40, blz. 725-747 23 blz.

### Reusing Timber Formwork in Building Construction: Testing, Redesign, and Socio-Economic Reflection

Pronk, A. D. C., Brancart, S. & Sanders, F., 28 apr. 2022, In: Urban Planning. 7, 2, blz. 81-96 16 blz.

### Flexible Forming for Fluid Architecture

Pronk, A. D. C., 13 okt. 2021, Berlin: Springer. 582 blz.

### Re-use of formwork for a Villa in Amsterdam

Pronk, A. D. C., 25 aug. 2021. 12 blz.

### Preface on special issue: Lightweight Innovative Ice Structures

Pronk, A. D. C., 1 mrt. 2021, In: International Journal of Space Structures. 36, 1, blz. 3 1 blz.

### **Success factors in the realization of large ice projects in education**

Pronk, A. D. C., Luo, P., Li, Q., Sanders, F. C., Overtoom, M., Coar, L., Fakhzarei, M. & Ashrafi, A., 1 mrt. 2021, In: International Journal of Space Structures. 36, 1, blz. 4-12 9 blz.

### **Collaborative design between architecture and structure of large complex ice shell based on air-ribbed inflatable mold: A case of ice restaurant**

Luo, P., Yang, S., Nie, Y., Wu, Y., Chen, J., Pronk, A. & Zhang, R., mrt. 2021, In: International Journal of Space Structures. 36, 1, blz. 37-47 11 blz.

### **Structural performance under solar radiation of the 30.5-meter-high Flamenco Ice Tower**

Li, Q., Mergny, E., Pronk, A., Wu, Y. & Luo, P., mrt. 2021, In: International Journal of Space Structures. 36, 1, blz. 48-66 19 blz.

### **大跨度冰壳结构设计建造一体化关键技术研究与应用**

Wu, Y., Liu, X., Luo, P. & Pronk, A., dec. 2020, In: Journal of Building Structures. 41, S2, blz. 323-329 7 blz.

### **Structural modelling, construction and test of the first 3d-printed gridshell in ice composite**

Pronk, A. D. C., Li, Q. & Mergny, E., 1 sep. 2020, In: Journal of the International Association for Shell and Spatial Structures. 61, 3, blz. 177-186 10 blz.

### **Material tests and execution methods of linear composite pykrete structural elements**

Pronk, A. D. C., de Boer, M. B. G., van de Hoef, J. M., Otterspoor, P. M. L. M., Pieloor, L. M. J. & Vens, O. D., 15 aug. 2020. 9 blz.

### **Structural design and validation of a pykrete tower through form finding**

Pronk, A. D. C., de Boer, M. B. G., van de Hoef, J., Otterspoor, P. M. L. M., Pieloor, L. M. J. & Vens, O. D., 15 aug. 2020. 6 blz.

### **The property of fiber reinforced ice under uniaxial compression**

Wu, Y., Lou, X., Liu, X. & Pronk, A., 1 apr. 2020, In: Materials and Structures/Materiaux et Constructions. 53, 2, 15 blz., 29.

### **蛟雲蛋蛙**

Pronk, A. D. C. & Luo, P., 15 dec. 2019, In: Architectural Practice. 2019, 11, blz. 154-156 3 blz.

### **3D printed grid shell in ice composite**

Pronk, A. D. C., Bouw, I., Ezendam, T., van Hierden, N. Z., Vleeshouwers, J. & van der Weijden, D., 6 okt. 2019, *IASS Symposium 2019 - 60th Anniversary Symposium of the International Association for Shell and Spatial Structures; Structural Membranes 2019 - 9th International Conference on Textile Composites and Inflatable Structures, FORM and FORCE*. Lazaro, C., Bletzinger, K-U. & Onate, E. (redacties). International Center for Numerical Methods in Engineering (CIMNE), blz. 1341-1348 8 blz.

### **Structural behavior of ice composite for 3D printing**

Pronk, A. D. C., Jansen, D., Kara, K., Van Laar, J. & Willems, H., 6 okt. 2019, *IASS Symposium 2019 - 60th Anniversary Symposium of the International Association for Shell and Spatial Structures; Structural Membranes 2019 - 9th International Conference on Textile Composites and Inflatable Structures, FORM and FORCE*. Lazaro, C., Bletzinger, K-U. & Onate, E. (redacties). International Center for Numerical Methods in Engineering (CIMNE), blz. 2503-2510 8 blz.

### **Design, construction and monitoring of an ice composite shell structure**

Wu, Y., Liu, X., Chen, B., Li, Q., Luo, P. & Pronk, A., 1 okt. 2019, In: Automation in Construction. 106, 13 blz., 102862.

### **Editorial special issue: advanced manufacturing and materials for inovative structural design**

Orr, J., Pronk, A. & Ibell, T., 1 apr. 2019, In: Structures. 18, 1 blz.

### **The 2017–18 design and construction of ice composite structures in Harbin**

Pronk, A., Mistur, M., Li, Q., Liu, X., Blok, R., Liu, R., Wu, Y., Luo, P. & Dong, Y., 1 apr. 2019, In: Structures. 18, blz. 117-127 11 blz.

### **Fluid architecture and flexible moulding**

Pronk, A. D. C., 27 feb. 2019, Eindhoven: Technische Universiteit Eindhoven. 600 blz.

### **Terra-ink additive earth manufacturing for emergency architecture**

Venturi, T., Turrin, M., Setaki, F., Veer, F., Pronk, A., Teuffel, P., Moonen, Y., Slangen, S. & Vorstermans, R., 1 jan. 2019, In: Spool. 6, 2, blz. 41-46 6 blz.

### **Design and construct of the 30.5 meter Flamenco Ice Tower**

Pronk, A. D. C., Wu, Y., Luo, P., Li, Q., Liu, X., Brands, S., Blok, R. & Dong, Y., 16 jul. 2018. 8 blz.

### **Resource-efficient structural design**

Blok, R., Habraken, A. P. H. W., Pronk, A. D. C. & Teuffel, P. M., 2018, *Proceedings of the IASS Symposium 2018: Creativity in Structural Design*. Mueller, C. & Adriaenssens, S. (redacties). blz. 1-10

### **Spong3d : 3D printed facade system enabling movable fluid heat storage**

Sarakinioti, V., Turrin, M., Teeling, M., De Ruiter, P., Van Erk, M., Tenpierik, M., Konstantinou, T., Knaack, U., Pronk, A. D. C., Teuffel, P. M., van Lier, A. J., Vorstermans, R. L. G., Dolkemade, E., de Klijjn, M. L., Loonen, R. C. G. M., Hensen, J. L. M. & Vlasblom, D., dec. 2017, In: Spool. 4, 2, blz. 57-60

### **The warm igloo**

Pronk, A. D. C., Mergny, E., Luo, P. & Wu, Y., 9 okt. 2017, *Structural membranes 2017, Munich, Germany 9-11 October 2017*. Onate, E., Bletzinger, K-U. & Kroplin, B. (redacties). blz. 1-6

### **3D printing of ice**

Pronk, A. D. C., Moonen, Y., AOb, C., Luo, P. & Wu, Y., 25 sep. 2017, *Interfaces - Architecture. Engineering. Science : IASS Annual symposium 2017, 25-28 September 2017, Hamburg, Germany*. Bogle, A. & Grohmann, M. (redacties). Hamburg: Hafencity University , blz. 1-6

### **Architectural Design learning by construction: review of Sino-Euro joint studio of ice architecture construction**

Luo, P., Yuan, L., Wang, K., Wu, Y. & Pronk, A. D. C., 25 sep. 2017, *2017 IASS Symposium, 25-28 September 2017, Hamburg, Germany*.

### **Form-finding and construction of ice composite shell structures**

Wu, Y., Liu, X., Chen, B., Li, Q., Luo, P., Pronk, A. D. C. & Mergny, E., 25 sep. 2017, *2017 IASS Symposium, 25-28 September 2017, Hamburg, Germany*.

### **Mechanical performances and structural safety evaluation of ice composite shell structures**

Li, Q., Chen, B., Liu, X., Luo, P., Pronk, A. D. C. & Mergny, E., 25 sep. 2017, *2017 IASS Symposium, 25-28 September 2017, Hamburg, Germany*.

### **Success factors in the realization of large ice projects in education**

Pronk, A. D. C., Luo, P., Li, Q., Sanders, F., Overtoom, M. & Coar, L., 25 sep. 2017, *Interfaces - Architecture. Engineering. Science : IASS Annual symposium 2017, 25-28 September 2017, Hamburg, Germany*. Bogle, A. & Grohmann, M. (redacties). Hamburg: Hafencity University , blz. 1-6 6 blz.

### **IASS working group Advanced manufacturing**

Pronk, A. D. C., 28 dec. 2016, 1 blz.

### **Expo of Ice Sculptures at Exposition in Harbin China**

Pronk, A. D. C., Moonen, Y., Ide, G., de Jonghe, L. & Gort, D., 24 dec. 2016

### **Expo Flexible Formwork**

Pronk, A. D. C., 18 dec. 2016

### **Flexible formwork technologies: a state of the art review**

Hawkins, W., Herrmann, M., Ibell, T., Kromoser, B., Michaelski, A., Orr, J., Pedreschi, R., Pronk, A. D. C., Schipper, R., Shepherd, P., Veenendaal, D., Wansdronk, R. & West, M., 15 dec. 2016, In: *Structural Concrete*. 17, 6, blz. 911–935 25 blz.

### **NBD Bouwdetails RC5**

Pronk, A. D. C. & Houtman, P., 11 dec. 2016, Den Haag: BIM Media BV. 256 blz.

### **Concrete Shell at Dutch Design Week 2016**

Pronk, A. D. C., 15 okt. 2016

### **Da Vinci's Bridge in ice and other ice structures with an Inflatable mould**

Pronk, A. D. C., Arntz, M. H. F. P. & Hermens, L. J., 26 sep. 2016, *Proceedings of the IASS Annual Symposium 2016 Spatial Structures in the 21st Century*. Kawaguchi, K., Ohsaki, M. & Takeuchi, T. (redacties). International Association for Shell and Spatial Structures, 8 blz.

### **Structural experiments with ice (composite) shells**

Belis, J., Martens, K., Van Lancker, B. & Pronk, A., 5 sep. 2016, *Insights and Innovations in Structural Engineering, Mechanics and Computation: Proceedings of the Sixth International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 5-7 September 2016*. Zingoni, A. (redactie). CRC Press Taylor & Francis Group, 5 blz.

### **Design of Da Vinci's bridge in ice**

Pronk, A. D. C., Blok, R., van Brunschot, M. C. A. J., van Lier, A. J., van de Mortel, F. F. H., Williams, K. K., Arntz, M. G. A. J., Hermens, L. J., Koekkoek, R. & van de Nieuwenhof, T. A. H., 15 aug. 2016, *Structures and Architecture: beyond their limits : proceedings of the third International Conference on Structures and Architecture (ICSA2016), Guimarães, Portugal, 27-29 July 2016*. Cruz, P. J. S. (redactie). London: CRC Press/Balkema, blz. 363–375 13 blz.

### **Historical development of structural ice**

Pronk, A. D. C., Vasiliev, N. & Belis, J. L. I. F., 15 aug. 2016, *Structures and Architecture : beyond their limits : proceedings of the third International Conference on Structures and Architecture (ICSA2016), Guimarães, Portugal, 27-29 July 2016*. Cruz, P. J. S. (redactie). London: CRC Press Taylor & Francis Group, blz. 339-347 9 blz.

### **Development and exploitation of ice Architecture and structures (in Chinese)**

Pronk, A. D. C., 15 jun. 2016, *The 16th Academic Conference of Space Structures in China, Hangzhou, 2016*. 6 blz.

### **Structures and architecture 2016 Taylor & Francis Group London isbn 978-1-138-02651-3**

Pronk, A. D. C., 6 jun. 2016, *Structures and architecture 2016 Taylor & Francis Group London isbn 978-1-138-02651-3 Page 339-347 363-375*. cruz, P. (redactie). Taylor and Francis Ltd., blz. Page 339-347 363-375 18 blz.

### **Expo Ice Structures at ICSA 2016 (3rd International Conference on Structures and Architecture)**

Pronk, A. D. C., van de Nieuwenhof, T. A. H. & Koekkoek, R., jun. 2016

### **Ice Paradise in Juuka Finland**

Pronk, A. D. C., 13 feb. 2016

### **Organisation of a Symposium on Ice Structures in Juuka Finland**

Pronk, A. D. C., 12 feb. 2016

## **IASS 2015 Expo**

Pronk, A. D. C., 20 aug. 2015

### **Flexible mould by the use of spring steel mesh**

Pronk, A., El Ghazi, H., Seffinga, A. & Schuijers, N. H., 17 aug. 2015, blz. 1-9.

### **Sun-Spotter : gravity point displacement as solar-tracking principle**

Pronk, A., Dizdar, D. & Schuurmans, W. A., 17 aug. 2015.

### **The calculation and construction of the highest ice dome : the Sagrada Familia in Ice:**

Pronk, A., 16 aug. 2015, blz. 1-13.

### **The VaCo Mould, a research about a new moulding principle for double curved concrete panels**

Pronk, A., Lusing, T. & Versteeg, R. H. P. G., 16 aug. 2015, blz. 1-9. 6 blz.

### **A review on the development of reinforced ice for use as a building material in cold regions**

Vasiliev, N. K., Pronk, A. D. C., Shatalina, I. N., Janssen, F. H. M. E. & Houben, R. W. G., 1 jul. 2015, In: Cold Regions Science and Technology. 115, blz. 56-63 8 blz.

### **Ice composites as construction materials in projects of ice structures**

Vasiliev, N. K. & Pronk, A. D. C., 14 jun. 2015, blz. 1-11.

### **Ice and ice-soil composites as construction materials in ice structures**

Pronk, A. D. C. & Vasiliev, N., 5 jun. 2015, In: Izvestiya VNIIG. 277, blz. 35-45

### **Kinegrity: the kinetic transformation of a tensegrity**

Pronk, A. D. C., Buskes, H., Klerk, L. S. & Koelewijn, P., 15 sep. 2014, *Proceedings of the IASS-SLTE 2014 Symposium "Shells, Membranes and Spatial Structures: Footprints", 15-19 September 2014, Brasilia, Brazil*. Brasil, R. M. L. R. F. & Pauletti, R. M. O. (redacties). International Association for Shell and Spatial Structures, 9 blz. 264

### **Spraying pykrete: The spraying of water and wood fibers to reinforce ice**

Pronk, A. D. C., Vasiliev, N., Janssen, F. H. M. E. & Houben, R. W. G., 15 sep. 2014, *Proceedings of the IASS-SLTE 2014 Symposium "Shells, Membranes and Spatial Structures: Footprints", September 15-19, 2014, Brasilia, Brazil*. Basil, R. M. L. R. F. & Pauletti, R. M. O. (redacties). 9 blz.

### **The calculation and construction of a 30 meter span ice dome**

Pronk, A. D. C. & Borgart, A., 15 sep. 2014, *Proceedings of the IASS-SLTE 2014 Symposium "Shells, Membranes and Spatial Structures: Footprints", September 15-19, 2014, Brasilia, Brazil*. Brasil, R. M. L. R. F. & Pauletti, R. M. O. (redacties). 8 blz.

### **Transparent shell structure**

Pronk, A. D. C., van Dooren, T. A. & Hermans, J. W., 15 sep. 2014, *Proceedings of the IASS-SLTE 2014 Symposium "Shells, Membranes and Spatial Structures: Footprints", 15-19 September 2014, Brasilia, Brazil*. Brasil, R. M. L. R. F. & Pauletti, R. M. O. (redacties). blz. 1-8 8 blz.

### **Producing optimized structures with inflatables structural membranes 2013**

Pronk, A. D. C., Dominicus, M. M. T., von Buelow, P., van Dijk, S. H. M. & van de Koppel, W. J., 1 dec. 2013, *Textile Composites and Inflatable Structures VI - Proceedings of the 6th International Conference on Textile Composites and Inflatable Structures, Structures Membranes 2013*. Bletzinger, K. U., Kröplin, B. & Onate, E. (redacties). blz. 505-519 15 blz.

### **Kinetic geiger dome with photovoltaic panelsstructural membranes 2013**

Pronk, A. D. C., Dominicus, M. M. T. & da Conceicao van Nieuwenhuizen, J., 7 okt. 2013, *VI International Conference on Textile Composites and Inflatable Structures STRUCTURAL MEMBRANES 2013, October 9-11, 2013, Munich, Germany*.

Bletzinger, K. U., Kroplin, B. & Onate, E. (redacties). Barcelona: International Center for Numerical Methods in Engineering (CIMNE), blz. 461-472 12 blz.

**technical textiles in architecture, construction and interiors**

Pronk, A. D. C., 6 jun. 2013, *technical textiles in architecture, construction and interiors*. Birkhäuser Verlag, 18 blz.

**Detail in architectuur : concept, techniek, materiaal**

Pronk, A. D. C., Dominicus, M. M. T., ten Hoop, L. D. & Merks, L. H. A., 2013, 2e herziene druk redactie Den Haag: BIM Media. 161 blz.

**84 ways to manipulate a membrane**

Pronk, A. & Dominicus, M., 1 dec. 2012, In: Journal of the International Association for Shell and Spatial Structures. 53, 4, blz. 257-270 14 blz.

**Eindrapportage vervolg haalbaarheidsstudie reconstructie Philips Paviljoen 1958**

Riemersma, M. & Pronk, A. D. C., 30 okt. 2012, Stichting Reconstructie Philips Paviljoen 1958. 34 blz.

**8 plannen voor de herbestemming van een rioolgemaal**

Pronk, A. D. C. (redactie) & Melis, L. (redactie), 2012, Eindhoven: Technische Universiteit Eindhoven. 79 blz.

**Façade elements based on optimised open cell structures : An Experimental modelling proces for the designer**

Dominicus, M. M. T., Hoppe, ten, L. D., Beetz, J., Pronk, A. D. C. & Mohammadi, M., 2012, *Design and Decision Support Systems in Architecture and Urban Planning Conference (DDSS2012), 27-29 August 2012, Eindhoven, The Netherlands*. Eindhoven, blz. 1-8

**Solar protection**

Cox, M. G. D. M., Haas, de, T. C. A., Gijsbers, R., Pronk, A. D. C., Vrouwe, I. & Weijers, K. A. M., 2012, *Flexible Composite Materials in Architecture, Construction and Interiors*. Motro, R. (redactie). Basel: Birkhäuser Verlag, blz. 70-85

**85 ways to make a membrane mould**

Pronk, A. D. C. & Dominicus, M. M. T., 2011, *Proceedings of the International Conference on Textile Composites and Inflatable Structures (Structural Membranes 2011), 5-7 October 2011, Barcelona, Spain*.

**All-glass shell scale models made with an adjustable mould**

Belis, J., Pronk, A. D. C., Schuurmans, W. B. & Blancke, T., 2011, *Proceedings of the IABSE-IASS Symposium, 20-23 september, 2011, London, UK*. Zürich: International Association for Bridge and Structural Engineering, blz. 1-8

**Detail in architectuur : concept, techniek, materiaal**

Pronk, A. D. C., Dominicus, M. M. T., ten Hoop, L. D. & Merks, L. H. A., 2011, Den Haag: SDU Uitgevers. 161 blz.

**Modeling and producing optimal open cell structures for architecture**

Pronk, A. D. C., Dominicus, M. M. T. & ten Hoop, L. D., 2011, *Proceedings of IASS 2011, 20-23 September 2011, London*. London: International Association for Shell and Spatial Structures (IASS)

**Modelling and producing optimal open cell structures for architecture**

Dominicus, M. M. T., Khademagha, P. & Pronk, A. D. C., 2011, *Proceedings of the IABSE-IASS Symposium, 20-23 september, 2011, London, UK*. Zürich: International Association for Bridge and Structural Engineering

**Groene Boot**

Pronk, A. D. C., 2010, In: Trouw. 25-04-2009, 2 blz.

**Paper Model Kit of Philips Paviljoen - Corbusier, Xenakis, Varese**

Pronk, A. D. C., Veldhuijzen van Zanten, V., Reijnders, H. M., Treib, M. & Ruegg, A., 2010, Bussum: THOTH.

### **Textile techniques and tectonics in architecture**

Pronk, A. D. C. & Vrouwe, I., 2010, *Proceedings of the International Symposium of the International Association of Shell and Spatial Structures (IASS), 8-12 November 2010, Shanghai, China*. Zhang, Q., Yang, L. & Hu, Y. (redacties). Shanghai: China Architecture & Building Press, blz. 160-161

### **The production of free formed concrete elements in a flexible mould**

Pronk, A. D. C., Dominicus, M. M. T. & ten Hoop, L. D., 2010, *Proceedings of the International Symposium of the International Association of Shell and Spatial Structures (IASS), 8-12 November 2010, Shanghai, China*. Zhang, Q., Yang, L. & Hu, Y. (redacties). Shanghai: China Architecture & Building Press, blz. 158-159

### **Double-curved surfaces using a membrane mould**

Pronk, A. D. C., Rooy, van, I. & Schinkel, P., 2009, *Proceedings of the International Association for Shell and Spatial Structures (IASS) Symposium 2009*. Domingo, A. & Lazaro, C. (redacties). Valencia

### **NBD Bouwdetails (Nederlandse Bouwdocumentatie)**

Pronk, A. D. C., Hartman, R., Houtman, P., Cox, M. G. D. M. & Meijer, M., 2009, Den Haag: SDU Uitgevers.

### **Nieuwe maltechnieken voor vrije vormen**

Pronk, A. D. C., 2009, In: *Bouwwereld*. 2009, 15, blz. 18-20

### **Research on the combination of water and membranes as a structural and sound insulation building material**

Pronk, A. D. C., Maffei, R. & Martin, H. J., 2009, *Proceedings of the International Association for Shell and Spatial Structures Symposium 2009, Lalancia*. Domingo and, A. & Lazaro, C. (redacties). Valencia

### **Research on the combination of water and membranes as a structural building material.**

Pronk, A. D. C., Maffei, R. & Martin, H. J., 2009, *Evolution and Trends in Design, Analysis and Construction of Shell and Spatial Structures : 50th Anniversary Symposium 50th Anniversary Symposium of the International Association for Shell and Spatial Structures (IAAS 2009) 28 September - 02 October 2009, Valencia Spain*. Lazaro, C. & Domingo, A. (redacties). Valencia: International Association for Shell and Spatial Structures (IASS) , blz. Fr.2.F-

### **The Sound Insulation of Water**

Wenmaekers, R. H. C., van der Aa, B. A., Pronk, A. D. C., Couthinho, A. & Luxemburg, van, L. C. J., 2009, *NAG/DAGA 2009*. blz. 1339-1341

### **Blobs verrijking voor Eindhoven**

Pronk, A. D. C., 2008, In: *Brabants Dagblad*. 8-7-2008, blz. 24-24

### **Fuksas in Eindhoven, fietsenkelder**

Pronk, A. D. C., 2008, In: *Stedebouw en Architectuur*. 2008, 3, blz. 27-27 1 blz.

### **Mathematical Beauty in Architecture**

Pronk, A. D. C., Koman, H. & Luijckx, S., 2008, *Mathematical Connections in Art, Music, and Science*. Sarhangi, R. & Sequin, C. (redacties). Leeuwarden: Tarquin

### **Nature's experiences for building technology**

Pronk, A. D. C., Blacha, M. W. F. & Bots, A., 2008, *IASS-SLTE Book of Abstracts: New materials and technologies, new designs and innovations, Acapulco*. Salinas, J. G. O. (redactie).

### **Op zoek naar een integere bouwmethodiek : twee bouwmethododes voor vrije vorm-architectuur**

Pronk, A. D. C., 2008, In: *Architect*. 39, 2, blz. 74-77 4 blz.

### **The production of free formed concrete elements in a flexible mould**

Pronk, A. D. C., Dominicus, M. M. T., Ketelaars, J. & van Laerhoven, P. F. C., 2008, *Proceedings of International Symposium of the International Association for Shell and Spatial Structures (IASS) : New Materials and Technologies*,

*New Designs and Innovations: Acapulco, Mexico, 27-31 October 2008.* Salinas, J. G. O. (redactie). Ajusco Coyoacan: Grupo Editorial Formato

**A feasible way to make freeform shell structures**

Pronk, A. D. C., Folmer, T. & Bullens, A., 2007, *IASS 2007: Book of Abstracts*:

**Heat-transmitting membrane : volume 1**

Pronk, A. D. C., Haas, de, T. C. A. & Cox, M. G. D. M., 2007, *Proceedings of International Conference on Textile Composites and Inflatable Structures, Structural Membranes 2007*.

**The reconstruction of the Philips-pavilion (V1)**

Pronk, A. D. C., Houtman, R. & Afink, M., 2007, *Proceedings of the conference Sources of architectural form*. Hussain Mousa Dashti, X. (redactie). Kuwait

**ADAPTABLES 2006 : proceedings of the joint CIB, Tensinet, IASS international conference on adaptability in design and construction, Volume 1**

Scheublin, F. J. M. (redactie) & Pronk, A. D. C. (redactie), 2006, Eindhoven: Technische Universiteit Eindhoven. 385 blz.

**ADAPTABLES 2006 : proceedings of the joint CIB, Tensinet, IASS international conference on adaptability in design and construction, Volume 2**

Scheublin, F. J. M. (redactie), Pronk, A. D. C. (redactie), Borgard, A. (redactie) & Houtman, R. (redactie), 2006, Eindhoven: Technische Universiteit Eindhoven. 300 blz.

**ADAPTABLES 2006 : proceedings of the joint CIB, Tensinet, IASS international conference on adaptability in design and construction, Volume 3**

Scheublin, F. J. M. (redactie), Pronk, A. D. C. (redactie), Prins, M. (redactie), Emmitt, S. (redactie) & Otter, den, A. F. H. J. (redactie), 2006, Eindhoven: Technische Universiteit Eindhoven. 155 blz.

**ADAPTABLES 2006 : proceedings of the joint CIB, Tensinet, IASS international conference on adaptability in design and construction, Volume 4**

Scheublin, F. J. M. (redactie) & Pronk, A. D. C. (redactie), 2006, Eindhoven: Technische Universiteit Eindhoven. 32 blz.

**"A new construction method for Philips pavilion"**

Pronk, A. D. C., 2006, *Presentation of the research on the reconstruction of the Philips Pavilion. Symposium le Poème Electronique, 18 juni 2006*.

**Another holiday Inn Barcelona ?**

Wilkens, F. & Pronk, A. D. C., 2006, *Adaptables2006: International Conference on Adaptable Building Structures, Eindhoven, Eindhoven, July 2006 (vol. 4)*. Scheublin, F., Pronk, A. D. C., Borgard, A. & Houtman, R. (redacties). Eindhoven: Technische Universiteit Eindhoven, blz. 21-25

**Archimedia Mortal Tektonics**

Vrouwe, I. & Pronk, A. D. C., 2006, *Adaptables2006: International Conference on Adaptable Building Structures, Eindhoven, July 2006 (vol. 2)*. Scheublin, F., Pronk, A. D. C., Borgard, A. & Houtman, R. (redacties). Eindhoven, blz. 305-309

**Comfortverbetering van het binnenklimaat dmv directe toiletafzuiging**

Cox, M. G. D. M., Filippini, G. J. A. & Pronk, A. D. C., 2006, Eindhoven: Technische Universiteit Eindhoven.

**Heat adapting membrane**

Pronk, A. D. C., 2006, *Proceedings of the joint CIB, Tensinet, IASS International Conference on Adaptability in Design and Construction: "Adaptables 2006", Eindhoven, July 2006, (vol. 1)*. Scheublin, F., Pronk, A. D. C., Borgard, A. & Houtman, R. (redacties). Eindhoven, blz. 15-16



### **Inflatable Ring Exhibition**

Pronk, A. D. C., 2006, *Proceedings of the joint CIB, Tensinet, IASS International Conference on Adaptability in Design and Construction: "Adaptables 2006", 3-5 juli 2006*. Scheublin, F., Pronk, A. D. C., Borgard, A. & Houtman, R. (redacties). Vol. 1.

### **Spuitbeton op voorgespannen membranen**

Pronk, A. D. C., 2006, In: *Cement*. 58, 5, blz. 40-42 3 blz.

### **The 2 Million Euro Philipspavilion**

Pronk, A. D. C., Houtman, R. & Afink, M., 2006, *Proceedings of the IASS-APCS 2006 International symposium New shell and spatial Structures, Oct. 16-19*. Lan, ), T. (redactie). blz. 509-516

### **Uitvinding "Werkwijze voor de producten van schalen met vrije vormen", Dutch patent.**

Pronk, A. D. C., 2006

### **Barbapapa Architectuur**

Pronk, A. D. C., 2005, In: *Bright : Tech/Life/Style*. 03, June/July, blz. 38-43

### **Gebouwen blazen**

Pronk, A. D. C., 2005, In: *De Ingenieur*. 17, 14/15, blz. 45-

### **Making Blobs with a Textile Mould**

Pronk, A. D. C. & Houtman, R., 2005, *Computational Methods in Applied Sciences, Volume 3, Textile Composites and Inflatable Structures*. Eugenio, O. & Koplín, B. (redacties). Springer, blz. 305-322

### **Making Igloo's in September.**

Pronk, A. D. C. & Osinga, D. R., 2005, *Proceedings conference on Structural Membranes, Stuttgart, 2-4 Oct.* blz. 8-

### **An Art Pavillion Made by Rigidizing a Membrane Mould with Polyester**

Houtman, R., Pronk, A. D. C. & Moncrieff, E., 2004, *Textile Roofs, IASS Symposium Montpellier, Part I TP04: 6 pages on CDROM and in printed proceedings*. Sleight, A. (redactie). blz. 260-261

### **Blow your blob, Blob in the Faculty**

Pronk, A. D. C. & van Helvoirt, J., 2004, *Blob in the faculty 2004*. Eekhout, A. C. J. M. & Veldkamp, M. (redacties). Delft: DUP, blz. 140-151

### **T1 - An Art Pavillion Made by Rigidizing a Membrane Mould with Polyester**

Houtman, R., Pronk, A. D. C. & Moncrieff, E., 2004, *Textile Roofs, IASS Symposium Montpellier, Part II PO19, 6 pages on CDROM and in printed proceedings*. Sleight, A. (redactie). blz. 428-429

### **A fluid pavillion by rigidizing a membrane.**

Pronk, A. D. C., Houtman, R., Hanselaar, H. & Borgart, A., 2003, *Proceedings of the CIMNE Congress Structural Membranes, Barcelona*. Oñate, E. & Kröplin, B. (redacties). blz. 105-112

### **Blob architecture, art and expo pavillion at the Technical University Eindhoven**

Pronk, A. D. C. & Houtman, R., 2003, *Proceedings Textile Roofs 2003*. Grundig, L. (redactie). blz. 1-6

### **Making geometrical complex structural elements – a lightweight stage covering for an open-air theatre.**

Werkman, H., Bogart, A., Pronk, A. D. C., Langeveld, E. & Houtman, R., 2003, *Proceedings, CIMNE Congress Structural Membranes, Barcelona*. Oñate, E. & Kröplin, B. (redacties). blz. 244-249

### **Dubbel gekromde gevels of de maakbaarheid van blobs**

Pronk, A. D. C., 2002, In: *Stedebouw en Architectuur*. 19, 11, blz. 22-23

## **Activiteiten**

### **Journal of the International Association for Shell and Spatial Structures (Tijdschrift)**

Arno D.C. Pronk (Lid redactieraad)  
10 okt. 2021 → 1 jul. 2022

### **IASS WG21**

Arno D.C. Pronk (Organisator)  
23 aug. 2021 → 28 aug. 2021

### **summer school Harbin China**

Arno D.C. Pronk (Organisator)  
5 jul. 2021 → 17 jul. 2021

### **International Journal of Space Structures (Tijdschrift)**

Arno D.C. Pronk (Lid redactieraad)  
1 jan. 2021 → 1 jul. 2022

### **barcelona pavilion expo**

Arno D.C. Pronk (Organisator) & John Orr (Organisator)  
6 okt. 2019 → 11 okt. 2019

### **Harbin Institute of Technology (Externe organisatie)**

Arno D.C. Pronk (Voorzitter)  
9 sep. 2018 → 9 sep. 2034

### **workshop advanced manufacturing**

Arno Pronk (Organisator) & John Orr (Organisator)  
16 jul. 2018

### **construction of innovative structural ice pavilions**

Arno Pronk (Deelnemer) & Peng Luo (Organisator)  
13 dec. 2017 → 22 dec. 2017

### **workshop inflatable**

Arno Pronk (Organisator) & Peng Luo (Deelnemer)  
23 okt. 2017 → 27 okt. 2017

### **IASS Workgroup 21 on Advanced Manufacturing & Materials (Externe organisatie)**

Arno Pronk (Voorzitter), John Orr (Voorzitter) & Yiling Zhou (Lid)  
25 sep. 2017 → 9 sep. 2022

### **summer school in ice structures**

Arno Pronk (Bijdrager) & Peng Luo (Organisator)  
28 jun. 2017 → 11 jul. 2017

### **structural membranes (Externe organisatie)**

Arno D.C. Pronk (Voorzitter)  
6 jun. 2002 → 6 jun. 2030

### **Workinggroup 21, International Association for Shell and Spatial Structures (Externe organisatie)**

Arno D.C. Pronk (Lid)  
6 jun. 2002 → 6 jun. 2030

## Prijzen

### **4TU Lighthouse project, Terra Ink**

Pronk, Arno D.C. (Ontvanger), Turrin, M. (Ontvanger) & Venturini, T. (Ontvanger), 5 jan. 2017

### **first price for the most original ice contest**

Pronk, Arno D.C. (Ontvanger), 15 jan. 2022

### **First price Harbin international ice competition**

Pronk, Arno D.C. (Ontvanger), 21 dec. 2019

### **Ontwerpwedstrijd duurzaam drijvend wonen, april 2010**

Pronk, Arno D.C. (Ontvanger), 2010

### **The ice torch**

Pronk, Arno D.C. (Ontvanger), 4 feb. 2022

### **WA Chinese Architecture Awards 2018**

Pronk, Arno D.C. (Ontvanger), 6 jun. 2018

### **World Record Highest self-supporting ice shell**

Pronk, Arno D.C. (Ontvanger), 10 jan. 2018

## Pers / media

### **2019 Harbin Institute of Technology International Ice and Snow Innovative Design and Construction Competition**

Arno D.C. Pronk

8/01/20

1 item van Media-aandacht

### **A PENTAGONAL 'EIFFEL TOWER' MADE OF ICE AND CELLULOSE**

Arno D.C. Pronk

8/01/20

1 Mediabijdrage

### **Cambridge team unveils winning ice structure**

Arno D.C. Pronk

28/01/19

1 item van Media-aandacht

### **Cold and Austere Beauty in Harbin, China**

Arno D.C. Pronk

13/06/19

1 Mediabijdrage

### **Eindhovense ijsbouwers gaan oefenen voor Olympische winterspelen**

Arno D.C. Pronk

25/09/19

1 Mediabijdrage

### **Eindhovense ijstoren in China 'de mooiste'**

Arno D.C. Pronk

27/12/19  
1 Mediabijdrage

**Engineering with ice: U of A students build beam with visiting Dutch expert**

Arno D.C. Pronk  
19/02/20  
1 item van Media-aandacht

**harbin ice tower**

Arno Pronk  
25/01/18  
1 Mediabijdrage

**het maken van igloo's in Nederland**

Arno D.C. Pronk  
8/02/21  
1 Mediabijdrage

**ijs sculptuur**

Arno D.C. Pronk  
1/02/22  
1 Mediabijdrage

**Meet the ice doctor who's reviving the frozen science behind Canada's secret weapon from WWII**

Arno D.C. Pronk  
22/02/20  
4 items van Media-aandacht

**Meet the ice doctor who's reviving the frozen science behind Canada's secret weapon from WWII**

Arno D.C. Pronk  
22/02/20  
2 items van Media-aandacht

**opgeleverd voorbeeldige zelfbouw projecten in Amsterdam**

Arno D.C. Pronk  
1/11/17  
1 Mediabijdrage

**Reviving a frozen science; Dutch scientist teaches technique used to develop a secret weapon in the Second World War**

Arno D.C. Pronk  
29/02/20  
1 item van Media-aandacht

**WA Awards for Chinese Architecture 2018**

Arno D.C. Pronk & W. Chen  
22/02/19  
1 item van Media-aandacht

## **Projecten**

**SCB: Smart Circular Bridge for pedestrians and cyclists in a circular built environment NWE993**

Blok, R., Teuffel, P. M., Moonen, S. P. G., Blok, R., Manconi, M., Shahmirzaloo, A., Habraken, A. P. H. W., Pronk, A. D. C., van den Hurk, B., van Dorst, K., Looymans, A. & Moonen, S. P. G.  
26/09/19 → 31/12/23

## **Cursussen**

**Advanced design & construct of an innovative structural object**

1/09/15 → 31/08/23

**Entrance project structural engineering and design**

1/09/14 → ...

**Master project construction plan**

1/09/14 → ...

**Project 1 Building Physics & Structural Engineering and Design**

1/09/14 → ...

**Project 3 Building Physics & Structural Engineering and Design**

1/09/14 → ...

**Resource efficient structural engineering and design**

1/09/18 → ...

**Structural design with glass and other materials**

1/09/15 → 31/08/23