

## Curriculum Vitae

### Personal data

Date-, place of birth 1967-01-29, Berlin (Germany)

Nationality: German

Marital status: Married, 2 children

Qualifications Brief description



Dr.-Ing. Robert Stein is the Managing Associate of Prof. Dr.-Ing. Stein & Partner GmbH and Managing Director of S & P Consult GmbH. His business activities include project management, realisation of major projects, coordination of interdisciplinary project teams, management of international advanced training and educational activities in the field of underground infrastructure systems.

His main research activities focus on network asset management, especially research and development of remaining life assessment tools for decision support on maintenance and rehabilitation of water and wastewater infrastructures, the further development and improvement of microtunneling and pipe jacking capacities, and on new training concepts and methods.

He has been involved with a multitude of pipe jacking and microtunneling projects. Most notably as a technical advisor for the feasibility study of the project "Construction of a gas pipeline in the Baltic Sea by pipe jacking" in the area Greifswalder Bodden by order of Nord Stream AG, Switzerland in 2007; and as the project manager responsible for the approval process, planning, supervision and quality control of the 52 km long, DN 1400 - DN 2800, deep tunnel sewage system "Emscher Kanal". In the field of human resource development he is responsible for the development of the largest E-learning-platform in the area of civil engineering in cooperation with the National Association of the German Construction Industry.

Currently his main focus is the application of deterioration and aging models for the development of demand-orientated maintenance and rehabilitation strategies, which he and his team have utilised in more than 10,000 km of pipeline.

Since 1995 he has published more than 100 publications, reports, expertise and feasibility studies. He is the author of the reference book "Wertermittlung von Abwassernetzen (Asset Valuation of Sewer Networks)", Trenchless Technology for Installation of Cables and Pipelines – 2nd Volume: Horizontal Directional Drilling (HDD), the chapter on pipe jacking works (ATV DIN 18319) as well as of various technical articles.

International experience: USA (1995, 1994), France (1993)

Congresses, Conferences: (Chairman) Chairman & Keynote speaker – Infrastructure Middle East, Bahrain (2011), Session Asset-Management and Monitoring; Chairman – 28<sup>th</sup> annual INTERNATIONAL NO-DIG, Singapore (2010), Session Asset Management; Chairman – Underground Infrastructure Middle East, Bahrain (2010); Chairman – Trenchless Pipe Replacement Practices, Abu Dhabi (2009); Chairman 53. Concrete Solutions Germany (2009), Session Concrete and reinforced concrete pipes; Chairman NO DIG India (2007), Sessions V Capacity Building through Human Resource Development for Trenchless Technology Application and VI Procurement Processes & Economy; Chairman – Maintenance of Water and Wastewater Networks, Jordan (2007) together with GTZ; Chairman – Workshop Rehabilitation of Damaged Wastewater Pipes, Isfahan (2006); Chairman – Maintenance of Water and

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Wastewater Networks, Jordan (2006) together with GTZ; Int. Workshop on Innovation in Optimised Water Conservation, Tehran (2006); Chairman NO-DIG, Brisbane (2006), Session Rehabilitation / renewal; Chairman Water Middle East, Bahrain (2005), Session 2.1 Strategic Network Monitoring, Assessment and Planning and Session 2.2 Technologies and Procedures for Network Operation and Maintenance; Chairman NO-DIG (1997), Session 8: Detection and Local Repairs; RCUWM-Tehran international workshop on 'Public Participation, Awareness and Information Exchange for Water Resources Development and Management', Sultanate of Oman (2005)

Congresses,  
Conferences:  
(Speaker):

Et al. 10<sup>th</sup> Transportation Forum, Istanbul, Turkey (2009), Int. Conf. on Underground Construction Technology, USA (2008), Int. UNW-DPC Workshop on Drinking Water Loss Reduction, Germany (2008), RehaTec – WI (2007), Dortmund Rehabilitation Day, Germany (2007), Infrastructure Day, Sewer construction & rehabilitation, Leipzig, Germany (2007), 3. Int. Expert forum of wet waste experts and waste disposal practitioners, Schwabenberg, Germany (2007), 9<sup>th</sup> German Arab Business Forum, Berlin (2006), Dortmund Rehabilitation Day (2005), 4. DWA / Güteschutz Kanalbau / RSV / GSTT Rehabilitation Days (2005), Symposium River Basin Management, Wuppertal, Germany (2005), IFAT (2005), Oldenburg Pipeline Forum (2010, 2008, 2006, 2005, 2004), Lindau JT-Seminar (2010, 2006, 2005, 2004, 2003, 2002, 2000, 1999); LEARNTEC (2004), 1<sup>st</sup> Int. Conf. Innov. and Future Developm. in Cement Production and Concrete Constr. (2004), Forum Future Mobility (2004), Sewer System Forum – Value Conservation of Sewer Systems (2004), IFAT China (2004), Developm. of Sewer System Techn. (2004), Rainwater Days (2004), ATV - Rehabilitation Days (2004), eGOV Days (2004), CORP (2004), Geo Multimedia (2004), ASCE Int. Conf. Pipelines (2004, 2003), Conf. Success Story E-learning (2003), ATV - Software-Days (2003), URBAN (2003), Transportation Science Days (2003), ISUFT (2002), Mainau Mobility Forum (2002), Dresden Sewage Conf. (2002), Symposium Cost-effective Sewer Rehabilitation Planning (2001), Experience in Sewer Rehabilitation Methods (2001), Symposium Trenchless (2000), Int. Symposium for Mains (1999), Essen Symposium f. Water- and Waste-Management (1999), 1<sup>st</sup> Int. Videoconference Trenchless Techn. (1998), NO DIG (2005, 2004, 2003, 2001), Int. Congr. Pipeline Constr. (2000, 1997)

Foreign languages: English (fluent oral and written skills)  
French (basic knowledge)

### Professional experience

2008	Graduation at RWTH Aachen University, Faculty of Civil Engineering Subject of the dissertation: "Effects of optimised road gullies on the entry of solids into the sewer system" Degree: Dr.-Ing.
Since 2006-06-28	S & P CONSULT GmbH, Bochum Managing Director
Since 2006-06-28	Knowledge Factory – Company for the planning, development and distribution of web-based expert platforms for information, learning and working in technical fields Managing Director
Since 2000-01-19	visaplan – Organisation for digital media integration GmbH, Bochum Managing Director

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Since 1996-12-20	Prof. Dr.-Ing. STEIN & PARTNER GmbH, Bochum Managing Associate
1995-10-01 – 1996-12-19	Prof. Dr.-Ing. STEIN & PARTNER GmbH, Bochum Project manager engineering division
1994-10-01 – 1995-09-30	Indiana University - Purdue University at Indianapolis (IUPUI) Department of Construction Technology Scholarship of Oswald-Schulze-Endowment Research assistant of Dr. Iseley
1994-03-12 – 1994-09-30	Prof. Dr.-Ing. STEIN & PARTNER, Bochum Project manager engineering department
1991-07-15 – 1991-08-22	Westrohr GmbH & Co. Concrete Factory Calau Trainee
1990-01-01 – 1992-12-31	Ruhr-University Bochum, Faculty of Civil Engineering Chair of foundation engineering / soil mechanics Graduate assistant
1989-07-10 – 1989-07-21	Construction Company E. Heitkamp GmbH Trainee
1988-07-04 – 1988-08-26	Hochtief AG, Regional Office Bochum Construction Worker
<b>Technical education</b>	
1994-10-01 – 1995-09-30	Trenchless Techn. Adv. Mini-Directional Drilling Field Seminar (1995), Use of Drilling Fluids in Industrial Drilling (1995), Trenchless Techn. Mini-Directional Drilling Field Seminar (1994), Ditch Witch Customer Trenchless Seminar (1994)
1993-04-01 – 1993-07-30	Ecole Centrale Nantes, Laboratoire de Genie Civil Erasmus – scholarship holder
1988-10-01 – 1994-03-11	Ruhr-University Bochum, Faculty of Civil Engineering Studies of Civil Engineering. Main focus on environmental technology Degree: Dipl.-Ing. (Dr.-Ing. – in 2008)
<b>Memberships</b>	
2012	Member of ARGE LEWEKA - Arbeitsgemeinschaft "Lebensdauer und Werterhalt von Kanalisationsarbeiten" [ <i>working group "Service life and value retention of drain and sewer systems"</i> ]
2010	Member of "Kanalflüsterer", community of interest for the sustainable and efficient operation and maintenance management of drain and sewer systems
2009 – 2010	Member of the Advisory Board of International Society on Underground Freight Transportation by Capsule Pipelines and Other Tube/Tunnel Systems (ISUFT)
2009	Member of DWA-working group ES-8.9 Rehabilitation strategies
2007	German Society for Trenchless Technology (GSTT) Member of working group 7 "Trenchless Construction, Development and Research"

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2006 - 2008	German Society of Trenchless Technology (GSTT) Member of the Advisory Board
2005 – 2006	German Society for Trenchless Technology (GSTT) Member of working group 11 "Technical service life of rehabilitated supply and disposal lines"
2004 – 2005	German Association of Water, Wastewater and Waste (DWA) Member of working group ES 8.10 "Lining of drains and sewers with local produced and hardening pipes – anchor hose lining"
2001 - 2004	European Forum on Underground Construction (EFUC) Head of the working group "Instruction and Advanced Training"
Since 1999	German Society for Trenchless Technology (GSTT)
1998 – 1999	Joint Working Group International Tunnelling Association (ITA) / German Society for Trenchless Technology (GSTT) "Social cost"
<b>Publications</b>	<b>(Selection)</b>
74 2012	Stein, R.; Brakelmann, H.; Stein, D.: PowerTube – die Energieübertragung der Zukunft liegt unter der Straße - Möglichkeiten zur Beschleunigung von Genehmigungsverfahren im Einklang mit Bürgerinteressen, Unitracc-E-journal (04.2012) [ <i>PowerTube – the high voltage energy transfer of the future lies below the public road system - ways to speed up authorization procedures in line with citizens' interests</i> ]
73	Stein, R.: Stand und Einsatzbereiche der Injektionsverfahren bei der Kanalsanierung, In: tis – Tiefbau, Ingenieurbau, Straßenbau (03.2012), [ <i>Status and applications of injection processes for sewer rehabilitation</i> ]
72	Reference book Stein, R.; Stein, D.: Trenchless Technology for Installation of Cables and Pipelines – 2nd Volume: Horizontal Directional Drilling (HDD), Publisher: Prof. Dr.-Ing. Stein & Partner GmbH: ISBN 978-3-9810648-2-7
71 2011	Brakelmann, H.; Stein, D.; Stein, R.; Waschk, K.: Power-Tubes – innovatives Kabel- und Installationssystem, EW (2011) Issue 25-26, pp. 74 – 81 [ <i>Power-Tubes – innovative cable-and installation system</i> ]
70	Stein, R.: Utility Tunnelling – Länger, tiefer, kurviger, In: BI UmweltBau 3/11, pp. 8 – 17 [ <i>Utility Tunnelling – longer, deeper, more Curvaceous</i> ]
69	Stein, R.; Uhlenbruch, A.: Decision making in rehabilitation strategy forecasts, In : Proceedings : International Water Association 4th Leading Edge Conference on Strategic Asset Management, Mühlheim an der Ruhr, Germany, 27-30 September 2011
68	Stein, R.: Quo Vadis – Investment? In: Proceedings Infrastructure Middle East, Conference and Exhibition, Bahrain, 17-19 January 2011
67	Stein, R.; Beckmann, D.: Quality Assurance for Long Distance and Curved Jacking, In: Proceedings International No-Dig 2011, 29th International Conference and Exhibition, Paper Paper 4C-,1 Berlin, May 2011
66	Stein, R.; Uhlenbruch, A.: Die Kanalflüsterer – Werterhalt von Abwassersystemen im Rahmen des Generationenvertrages. In: Stuttgarter Berichte zur Siedlungswasserwirtschaft, Volume 207, pp. 37-42 [ <i>Maintaining the value of Drain and</i>

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		<i>Sewer system under consideration of the so-called 'generation-pact'</i>
65	2010	Stein, R.; Uhlenbroch, A.: Infrastructure Asset Management Guardian of the buried Treasure. In: Proceedings International No-Dig, 28th International Conference and Exhibition, pp. 44-0, Singapore, 8-10 November 2010
64		Stein, R.: Entwicklungen bei der Straßenentwässerung. In: Proceedings 23. Lindauer Seminar, March 2010 [ <i>Developments in road drainage</i> ]
63	2009	Reference book Stein, R.; Ghaderi, S.: Vermögensbewertung von Abwassernetzen [ <i>Asset Valuation of Sewer Networks</i> ], Fraunhofer IRB Verlag: ISBN 978-3-8167-7938-4
62		Stein, R.: The Construction Site on Your Desktop – Amazing Learning Success in Transferring Theory into Practice. In Conference CD, Online Educa Berlin, December 2-4, 2009
61		Stein, R.: Einsatz des Separations-Straßenablaufs zur Reduzierung von Feststoffeinträgen in Kanalisationen. In KA Korrespondenz Abwasser, Abfall (2009), No. 8, pp. 777-784 [ <i>Use of the Separation Street Outlet to Reduce the Input of Solid Matter into Sewer Systems</i> ]
60		Stein, R.; Cakmak, H.: Umfrage zum Zustand der Straßenablaufsysteme in Deutschland (Teil 2). In: bi UmweltBau (2009), No. 3, pp. 72 – 77 [ <i>Survey on the condition of Road Gully systems in Germany</i> ]
59		Stein, R.; Cakmak, H.: Umfrage zum Zustand der Straßenablaufsysteme in Deutschland (Teil 1). In: bi UmweltBau (2009), No. 2, pp. 94 – 98 [ <i>Survey on the condition of Road Gully systems in Germany</i> ]
58		Stein, R.; Uhlenbroch, A.: Differentiated aging analysis of concrete pipes – Differences in service life recorded for various construction periods. In: Proceedings 53 <sup>rd</sup> BetonTage
57		Stein, R.; Uhlenbroch, A.; Ghaderi, S.: Analysis of the long-term effects of Maintenance and Investment Strategies. In: International Conference on Underground Construction Technology, San Antonio, USA - Session: Establishing a Pathway for Achieving Water Utility Infrastructure Management
56	2008	Stein, R.; König, H. J.; Statetzni, C.: HDD-Felsbohrung in Hanglage. In: bi UmweltBau (2008), No. 6 [ <i>HDD-rock bore in a hillside situation</i> ]
55		Stein, R.: Auswirkungen optimierter Straßenabläufe auf Feststoffeinträge in Kanalisationen, doctorate 2008 In: RWTH Aachen Hochschulbibliothek <a href="http://darwin.bth.rwth-aachen.de/opus3/volltexte/2008/2491/">http://darwin.bth.rwth-aachen.de/opus3/volltexte/2008/2491/</a> [ <i>Effects of optimised road gullies on the entry of solids into the sewer system</i> ]
54		Stein, R.; Trujillo Alvarez, R.; Uhlenbroch, A.: Saving Water Resources by Leakage Reduction Strategies Using an Holistic Network Management. In: Indian Water Works Association Mumbai Centre (Event): Achieving 24 x 7 Continuous Water Supply, 10 <sup>th</sup> International Conference 11–12 <sup>th</sup> January, 2008 – Mumbai, India
53	2007	Stein, R.: Wird die digitale Technik Standard? In: bi UmweltBau (2007), No. 2, pp. 61 – 67 [ <i>Is digital Technology becoming Standard?</i> ]
52		Wolf, P.; Wagner, J.; Stein, R.; Cakmak, H.: Einschätzung des Gefährdungspotenzials für das Grundwasser beim Bau und Betrieb von Abwasserkanälen in Wasserschutzgebieten und Entscheidungshilfe für die Auswahl des Ableitungssystems, Oldenbourg

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	Industrieverlag GWF (12. 2007) [ <i>Assessment of the potential hazard to groundwater during the construction and operation of sewer systems in water protection areas and provides guidance for the selection of the drainage system</i> ]
51	Beckmann, D.; Stein, R.; Fabri, T.: CoJack – A new statics method of computing and controlling pipe Jacking. In: <i>Tunnelling and Underground Space Technology</i> 22 (2007), pp. 587-599
50	Stein, R.; Beckmann, D.: CoJack-Variante für GFK-Vortriebsrohre. In: <i>bi UmweltBau</i> (2007), No. 5, pp. 12 – 17 [ <i>Monitoring of GRP-jacking pipes with the online control and simulation program CoJack</i> ]
49	Stein, R.; Cakmak, H.: Zustand und Sanierungsbedarf von Schächten. In: <i>tis – Tiefbau, Ingenieurbau, Straßenbau</i> (2007), No. 4, pp. 56 - 63 [ <i>Condition of manholes and their demand for rehabilitation</i> ]
48 2006	Stein, R.; Oettinghaus, H.; Falk, C.: Optimierte Rohrverlegung in offener Bauweise. In: <i>tis – Tiefbau, Ingenieurbau, Straßenbau</i> (2006), No. 12, pp. 22 - 25 [ <i>Optimised pipe installation using the open-cut construction method</i> ]
47	Stein, R.: Master plan for a sustainable supply and disposal infrastructure of mega cities - Part III, In: E-Journal UNITRACC <a href="http://www.unitracc.com/aktuelles/artikel">http://www.unitracc.com/aktuelles/artikel</a> , Dec. 2012
46	Stein, R.: Master plan for a sustainable supply and disposal infrastructure of mega cities - Part II, In: E-Journal UNITRACC <a href="http://www.unitracc.com/aktuelles/artikel">http://www.unitracc.com/aktuelles/artikel</a> , Nov. 2012
45	Stein, R.: Master plan for a sustainable supply and disposal infrastructure of mega cities - Part I, In: E-Journal UNITRACC <a href="http://www.unitracc.com/aktuelles/artikel">http://www.unitracc.com/aktuelles/artikel</a> , Oct. 2012
44	Stein, R.; Brauer, A.: Rohrvortriebsarbeiten (ATV DIN 18319). In: Hankammer, G.; Mentlein, H. (eds.): <i>Abnahme von Bauleistungen – Tiefbau. Erkennen und Beurteilen von Planungs- und Ausführungsmängeln</i> . Köln : Verlagsges. Müller, 2006, pp. 304 - 316 [ <i>Pipe jacking works</i> ]
43	Stein, R.; Cordel, H.; Brauer, A.: Kommen wir dem Universalschild näher?. In: <i>tis – Tiefbau, Ingenieurbau, Straßenbau</i> (2006), No. 10, pp. 36 - 40 [ <i>Are we approaching the universal shield?</i> ]
42	Stein, R.; Oettinghaus, H.: Abdichtung von Rohrverbindungen in Kanalisationen durch Injektionen. In: Venzmer, H. (ed.): <i>Injektionsmittelabdichtung: Vorträge 7. Dahlberg-Kolloquium Wismar 2006</i> . Berlin: Bauwesen, 2006 (Schriftenreihe Altbauinstandsetzung 12), pp. 107 - 116 [ <i>Sealing of pipe joints in sewer networks by injections</i> ]
41	Stein, R.; Cakmak, H.; Neumann, M.: Bedarfs- und zustandsorientierte Reinigung. In: <i>bi UmweltBau</i> (2006), No. 6, pp. 51 – 57 [ <i>Demand- and condition-oriented cleaning</i> ]
40	Beckmann, D.; Stein, R.: Statische Online-Überwachung von Rohrvortrieben. In: <i>Straßen- und Tiefbau</i> (2006), No. 6, pp. 12 - 16 [ <i>Static online supervision of pipe jackings</i> ]
39	Stein, R.; Uhlenbroch, A.: STATUS Kanal. In: Herz, R. (publ.); Lehrstuhl Stadtbauwesen der TU Dresden (org.): <i>Beiträge zum 7. Kolloquium Stadtbauwesen am 27.01.2006 zum Thema Alterungsmodelle für Abwasserkanäle (Dresden 2006)</i> . – Original contributions (CD-ROM)
38	Stein, R.; Cakmak, H.: Erstellung bedarfsorientierter Reinigungspläne für



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	Entwässerungssysteme auf Grundlage der prEN 14654-1. In: Schriftenreihe Inst. f. Rohrleitungsbau Oldenburg. Volume 30. Essen : Vulkan, 2006, pp. 342 - 353 [ <i>Creation of demand-oriented cleaning plans for drainage systems based on prEN 14654-1</i> ]
37 2005	Stein, R.; Brauer, A., Bis, J.: Renovierung mit dem Wickelrohrverfahren. In: bi UmweltBau (2005), No. 12, pp. 90 - 95 [ <i>Renovation by the lining method with spirally wound pipes</i> ]
36	Stein, R.: UNITRACC präsentiert sich in neuem Design. Lehr-, Lern- und Arbeitsplattform mit erweiterten Inhalten am Start. In: tis-Tiefbau, Ingenieurbau, Straßenbau (2005), No. 10, pp. 46 - 49 [ <i>UNITRACC's new design. Learning, teaching and working platform with extended content starts</i> ]
35	Stein, R.; Stein, D.; Trujillo, R.: Entwicklung einer Kanalsanierungsstrategie auf der Grundlage von Substanzprognosen. In: SES - Schriftenreihe. Volume 3. Stuttgart : Private publishing house, 2005, pp. 102 - 118 [ <i>Development of sewer rehabilitation strategies based on substance prognosis</i> ]
34	Stein, R.: Präventive Reinigungsstrategien am Beispiel von Feststoffrückhalt aus Straßenabläufen. In: Ber. Wassergüte- u. Abfallwirtschaft TU München (2005), No. 185, pp. 123 - 143 [ <i>Preventive cleaning strategies considering as example solid support from street discharge</i> ]
33	Lipkow, A.; Stein, R.; Trujillo, R.: Saving water resources by leakage reduction strategies using a holistic management approach. In: Regional Centre on Urban Water Management RCUWM – Tehran / Ministry of Regional Municipalities, Environment and Water Resources, Oman / Inter – Islamic Network on Water Resources Development and Management, Jordan / United Nations Educational, Scientific and Cultural Organization UNESCO (org.): Int. Workshop Public Participation Awareness and Inform. Exchange f. Water Resources Developm. and Management (Muscat - Sultanate of Oman 2005). – Original contributions
32	Stein, R.; Prinz, G.: New Methods of electronic knowledge transfer. In: Int. Soc. f. Trenchless Technology ISTT (org.): NO DIG 2005 (23 <sup>rd</sup> Int. Conf. a. Exh. Rotterdam 2005). – Original contributions (CD-ROM)
31	Trujillo, R.; Stein, R.: Failure analysis and condition assessment of sewers and mains using fuzzy-logic. In: Int. Soc. f. Trenchless Technology ISTT (org.): NO DIG 2005 (23 <sup>rd</sup> Int. Conf. a. Exh. Rotterdam 2005). – Original contributions (CD-ROM)
30	Stein, R.; Lipkow, A.: Economic consequences of incorrect inspection and network data. In: Int. Soc. f. Trenchless Technology ISTT (org.): NO DIG 2005 (23 <sup>rd</sup> Int. Conf. a. Exh. Rotterdam 2005). – Original contributions (CD-ROM)
29	Beckmann, D.; Stein, R.; Fabri, T.: Statische Onlineüberwachung von Rohrvortrieben. In: Baublatt (2005), No. 53, pp. 12 - 15 [ <i>Static online-control of pipe jackings</i> ]
28	Stein, R.; Trujillo, R.: Vorausschauende Sanierungsplanung von Entwässerungssystemen auf der Basis konsistenter und stabiler Prognosemodelle. In: KA - Korrespondenz Abwasser (2005), No. 6, pp. 709 - 718 [ <i>Anticipatory rehabilitation planning of drainage systems on the basis of consistent and solid forecast models</i> ]
27	Beckmann, D.; Stein, R.; Fabri, T.: CoJack – statische Online-Überwachung von Rohrvortrieben. In: tis – Tiefbau, Ingenieurbau, Straßenbau (2005), No. 6, pp. 28 - 32 [ <i>CoJack – static online control of pipe jackings</i> ]

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26	Stein, R.; Brauer, A.; Pier, J.: Vortriebsbegleitende Online – Kontrolle von Bentonitsuspensionen zur Stützung der Ortsbrust bei Rohrvortrieben. In: tis – Tiefbau, Ingenieurbau, Straßenbau (2005), No. 4, pp. 12 - 17 [ <i>Online control of bentonite suspensions for heading face support of pipe jacking during jacking</i> ]
25	Trujillo, R.; Stein, R.; Lipkow, A.: Prognosegestützte Inspektions- und Sanierungsplanung bei Abwassernetzen am Beispiel eines Projektes. In: Schriftenreihe Inst. f. Rohrleitungsbau Oldenburg. Volume 29. Essen: Vulkan Verlag, 2005, pp. 546 - 555 [ <i>Inspection and rehabilitation planning of sewer networks on the basis of prognoses exemplified by a project</i> ]
24	Stein, R.; Brauer, A.: Nachhaltigkeit im Kanalbau – Neuere Erkenntnisse zum Rohrwerkstoffvergleich. In: Schriftenreihe Inst. f. Rohrleitungsbau Oldenburg. Volume 29. Essen : Vulkan Verlag, 2005, pp. 342 - 347 [ <i>Sustainability in sewer construction – New findings with regard to the comparison of materials</i> ]
23	Stein, R.; Brauer, A.: Eine interessante Alternative. In: bi UmweltBau (2005), No. 1, pp. 46 - 50 [ <i>An interesting alternative</i> ]
22	Stein, R.; Trujillo, R.; Ghaderi, S.: Inspektions- und Bestandsdaten von Entwässerungssystemen – Qualitätssicherung durch analytische Plausibilitätsprüfungen. In: tis – Tiefbau, Ingenieurbau, Straßenbau (2005), No. 1 - 2, pp. 32 - 35 [ <i>Inspection and stock data of drainage systems – quality assurance by means of analytic plausibility checks</i> ]
21 2004	Stein, R.; Brauer, A.: Einsatz von hydraulisch gebundenen Verfüllbaustoffen zur Rückverfüllung von Leitungsgräben im Kanalbau. In: abwasserREPORT (2004), No. 4, pp. 14 - 15 [ <i>The use of hydraulically bonded filling materials for the backfill of utility trenches in sewer construction</i> ]
20	Stein, R.: Bewertungsmethoden für zustandsorientierte Investitionsstrategien durch Einsatz von schadensspezifischen Alterungsmodellen. In: Int. Soc. f. Trenchless Technology ISTT (Veranst.): NO DIG 2004 (22 <sup>nd</sup> Int. Conf. a. Exh. Hamburg 2004).– Original contributions [ <i>Evaluation methods for condition-orientated investment strategies by using damage-specific ageing models</i> ]
19	Beckmann, D.; Stein, R.: Mathematische Simulation von Rohr-beanspruchungen bei schwierigen Vortriebsstrecken. In: Int. Soc. f. Trenchless Technology ISTT (Veranst.): NO DIG 2004 (22 <sup>nd</sup> Int. Conf. a. Exh. Hamburg 2004). – Original contributions, [ <i>Mathematic simulation of pipe loads at demanding pipe jacking sections</i> ]
18	Stein, R.; Trujillo, R.; Lipkow, A.: "STATUS Sewer" – A holistic model for efficient net management based on section-specific ageing prognoses. Published in: Int. Soc. f. Trenchless Technology ISTT (org.): NO DIG 2004 (22 <sup>nd</sup> Int. Conf. a. Exh. Hamburg 2004). – Original contributions
17	Stein, R.; Prinz, G.: KSI <sub>Underground</sub> – Kommunale Serviceplattform für Abwasser-Infrastrukturen. In: Fähnrich, K.-P.; Jantke, K. P.; Wittig, W. S. (eds.): Von e-Learning bis e-Payment 2004. Das Internet als sicherer Marktplatz (12. Leipziger Informatik-Tage LIT '04 Leipzig 2004). Berlin : Akad. Verl.-Ges. Aka, 2004. – Original contributions, pp. 38 - 46 [ <i>KSI<sub>Underground</sub> – Communal service platform for sewage-infrastructures</i> ]
16	Stein, R.; Trujillo, R.; Lipkow, A.: Bestimmung der Haltungssubstanz – die Lösung für eine



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	effektive Kanalsanierung. In: Verb. Dt. Rohr- u. Kanal-Technik - Unternehmen e.V. VDRK (Veranst.): X. VDRK-Fachseminar (Leipzig 2004). – Original contributions [ <i>Determination of the section substance – the solution for an effective sewer rehabilitation</i> ]
15	Stein, R.; Trujillo, R.: Evaluation methods of survival-capacity-oriented investment strategies of drain and sewer systems by the use of damage-specific aging models. Published in: Amer. Soc. of Civ. Eng. ASCE (org.); Galleher, J. J. jr. (publ.); Stift, M. T. (publ.): Pipelines 2004 (San Diego 2004). Reston : ASCE, 2004. - Original contributions
14	Stein, R.; Trujillo, R.; Lipkow, A. T.: Optimierung des Kanalbetriebs auf Basis haltungsbezogener Substanzprognosen. In: Ernst & Sohn Special, Kanal- und Rohrleitungsbau (2004), No. 3 Sanierung von Kanälen und Rohrleitungen, pp. 11 - 17 [ <i>Optimisation of the sewer operation on the basis of section-based substance prognoses</i> ]
13	Stein, R.: Trends und Entwicklungen der Zustandserfassung. In: bi UmweltBau (2004), No. 3, pp. 64 - 72 [ <i>Trends and developments of condition acquisition</i> ]
12	Stein, R.; Trujillo, R.; Lipkow, A.: Optimierung des Kanalbetriebes auf Basis haltungsbezogener Substanzprognosen. In: MUNLV NRW (org.), IKT (org.), ISA der RWTH Aachen (org.): Entwicklungen in der Kanalisationstechnik (Köln 2004). – Original contributions [ <i>Optimisation of the sewer operation on the basis of section-based substance prognoses</i> ]
11	Stein, R.: KSI <sub>Underground</sub> – Kommunale Serviceplattform für Abwasser-Infrastrukturen. In: Wimmer, M. A. (ed.); Oesterr. Comp. Ges. OCG (org.): e GOV Days: state-of-the-art 2004 (3 <sup>rd</sup> e GOV Days Wien 2004). Wien: OCG, 2004, pp. 62 - 74. - OCG – Schriftenreihe 177 [ <i>KSI<sub>Underground</sub> – Municipal service platform for waste water infrastructures</i> ]
10	Stein, R.; Trujillo, R.: Strategieentwicklung zum Betrieb und Unterhalt von Entwässerungssystemen - lassen sich die Aufgaben kostengünstig managen? In: Schriftenreihe Inst. f. Rohrleitungsbau Oldenburg (2004). Volume 28. Essen: Vulkan, 2004. [ <i>Development of strategies for the operation and maintenance of drainage systems – can the tasks be managed competitively?</i> ]
09	Stein, R.; Trujillo, R.; Lipkow, A.: Infrastruktur erhalten mit immer weniger Geld. In: Abwassertechn. Vereinigung ATV (org.): 3. ATV - Sanierungstage (Feuchtwangen 2004). – Original contributions, [ <i>Preserve infrastructures with less money</i> ]
08	Stein, R.; Prinz, G.: KSI <sub>Underground</sub> – Kommunale Serviceplattform für Abwasser-Infrastrukturen. In: Schrenk, M. (ed.); Competence Center of Urban and Regional Planning CORP, Ver. z. Förderung u. Erforsch. d. Stadtplanung u. Regionalentw. i. d. Inform.ges. (org.): CORP 2004 & Geo Multimedia 04 Computergestützte Raumplanung (9. Symp. z. Rolle d. Inform.techn. i. d. Stadt- u. Raumplanung sowie z. d. Wechselwirkungen zw. realem u. virtuellem Raum Wien 2004). Wien : Inst. f. EDV-gestützte Methoden in Architektur u. Raumplanung, 2004. – Original contributions [ <i>KSI<sub>Underground</sub> – Municipal service platform for sewage infrastructures</i> ]
07	Stein, R.: Effektiver Kanalnetzbetrieb durch optimierte Netzstandhaltung mit STATUS - Kanal. Wasserwirtschaftsinitiative NRW, NRW Referenzen Wasserwirtschaft, Unternehmensindex, Prof. Dr.-Ing. Stein & Partner GmbH, 2004 – <a href="http://www.wasser.nrw.de/687.html">www.wasser.nrw.de/687.html</a> [ <i>Effective operation of sewer networks by optimised network maintenance via STATUS sewer</i> ]

## Curriculum Vitae

06	2003	Stein, R.: A new qualification concept for sewer and pipeline construction based on an innovative network-based solution for virtual teaching, learning and working. In: Amer. Soc. of Civ. Eng. ASCE (org.); Najafi, M. (ed.): Pipelines 2003 (ASCE Int. Conf. Pipeline Eng. and Constr. Baltimore 2003). Reston : ASCE, 2003. – Original contributions, pp. 1449 – 1458
05	2000	Stein, R.: Moderne Werkzeuge – Planerische Aufgaben im Zuge der Kanalstandhaltung werden immer komplexer. Welchen Nutzen bieten hier integrierte Softwarelösungen? In: der gemeinderat (2000), No. 12, p. 46 [ <i>Modern tools – Planning tasks with regard to sewer maintenance are becoming more and more complex. Which benefit do integrated software solutions offer?</i> ]
04	2000	Stein, R.: Multimediales Informationssystem auf der Basis des Fachbuches "Instandhaltung von Kanalisationen" In: Hamburg Messe und Congress GmbH (org.): 6. Int. Kongr. Leitungsbau 2000. Hamburg : Private publishing house, 2000. – Original contributions, pp. 612 - 621 [ <i>Multimedia information system based on the reference book "Rehabilitation and Maintenance of Drains and Sewers"</i> ]
03		Stein, D.; Stein, R.: Fachinformationssystem - Instandhaltung von Kanalisationen (2 CD-ROM). Berlin : Ernst & Sohn, 2000 [ <i>Technical information system - Maintenance of sewer systems (2 CD-ROM)</i> ]
02	1997	Stein, R.: Der GSTT-Leitfaden als multimediales, wissensbasiertes Informationssystem. In: Hamburg Messe und Congress GmbH (org.): 5. Int. Kongr. Leitungsbau 1997. Hamburg : Selbstverlag, 1997. – Original contributions, pp. 815 - 827 [ <i>The GSTT-guideline as a multimedia- and knowledge-based information system</i> ]
01	1995	Sener, E. M.; Stein, R.: Mini-Horizontal Directional Drilling Manual. Dep. Constr. Techn., Purdue School of Eng. a. Techn., Indiana University - Purdue University at Indianapolis IUPUI : Private Publishing House, 1995
<b>Lectures</b>		<b>(selection)</b>
	2011	Brakelmann, H.; Stein, R.: Unter Höchstspannung - Übertragungstechnologien im Kosten-, Technik- und Akzeptanzvergleich – Beispiel PowerTube: lecture / Deutsche Umwelthilfe e.V., Forum Netzintegration Erneuerbare Energien, 10.-11. November 2011, Berlin [ <i>Under high voltage - Transmission technologies cost, technology and acceptance compared – Example PowerTube</i> ]
		Stein, R.: Werterhalt unserer Abwassersysteme im Rahmen des Generationenvertrages: lecture / 9. Münchener Runde 2011, 6. October 2011 [ <i>Value preservation of Drain and Sewer systems under consideration of the so-called 'generation-pact'</i> ]
		Stein, R.; D. Beckmann: Quality Assurance for Long Distance and Curved Jacking: lecture / International No-Dig 2011, 29th International Conference and Exhibition, Berlin, May 2011
		Stein, R.: Quo Vadis – Investment? : lecture / Infrastructure Middle East, Conference and Exhibition, Bahrain, 17-19 January 2011
		Stein, R.; Uhlenbruch, A.: Die Kanalflüsterer – Werterhalt von Abwassersystemen im Rahmen des Generationenvertrages: lecture / 2. Stuttgarter Runde Expertenforum zur Kanalsanierung, Stuttgart, Germany, 14. April 2011 [ <i>Value preservation of Drain and Sewer systems under consideration of the so-called 'generation-pact'</i> ]

## Curriculum Vitae

2010	Stein, R.; A., Uhlenbroch: Infrastructure Asset Management Guardian of the buried Treasure: lecture / International No-Dig, 28th International Conference and Exhibition, Singapore, 8-10 November 2010
	Stein, R.: Entwicklung und Erprobung eines Leitungskanalsystems mit integrierten Ver- und Entsorgungsleitungen: lecture / 24th Rohrleitungsforum, February 11-12, 2010 [ <i>Research, development and testing of a utility tunnel with supply and disposal lines</i> ]
	Stein, R.: Entwicklungen bei der Straßenentwässerung: lecture / 23. Lindauer Seminar, March 4-5, 2010 [ <i>Developments in the road drainage</i> ]
	Stein, R.: Investment management or how to achieve the best possible ROI. Underground Infrastructure Middle East, Bahrain, January 18-19, 2010
	Stein, R.: Concepts for utility tunnelling or how to use the underground to safeguard the future of our cities. Underground Infrastructure Middle East, Bahrain, January 18-19, 2010
2009	Stein, R.: The Construction Site on Your Desktop – Amazing Learning Success in Transferring Theory into Practice. Online Educa Berlin, December 2-4, 2009
	Stein, R.: Rehabilitation of Water and Force Mains, Promoting Trenchless Technology in Middle East, Abu Dhabi, Nov. 9th – 11th 2009,
	Stein, R.: Understanding Calculations and Monitoring of Jacking Forces and Stresses, Promoting Trenchless Technology in Middle East, Abu Dhabi, Nov. 9th – 11th 2009
	Stein, R.: The 5th transport alternative for pipeline-based freight transportation in congested urban areas and mega-cities, 10th Transportation Forum, Istanbul, Turkey, 27. Sept. – 01. Oct. 2009
	Stein, R.: Understanding calculations and monitoring of jacking forces and stresses: lecture / 2 <sup>nd</sup> ANNUAL TRENCHLESS TECHNOLOGY SUMMIT, Abu Dhabi, 2009
	Stein, R.: Evaluating requirements of jacking pipes and joints: lecture / 2 <sup>nd</sup> ANNUAL TRENCHLESS TECHNOLOGY SUMMIT, Abu Dhabi, 2009
2008	Stein, R.: Saving Water Resources by Leakage Reduction Strategies Using an Holistic Network Management: lecture / Achieving 24 x 7 Continuous Water Supply, 10 <sup>th</sup> International Conference 11–12 <sup>th</sup> January, 2008 – Mumbai, India
	Stein, R.: Optimierung von Investitionsentscheidungen beim Asset-Management von leitungsgebundenen Infrastrukturen, „Wayss & Freytag am Donnerstag“, Frankfurt am Main, 2008 [ <i>Optimization of investment decisions for asset-management of pipeline bound infrastructures</i> ]
	Stein, R.: KSI Underground – kommunale Serviceplattform für Abwasserinfrastrukturen, KGSt FORUM, Bremen, 2008 [ <i>KSI Underground –Service platform for municipal wastewater infrastructures</i> ]
2007	Stein, R.: Strategien für die Sanierung der Wasserverteilungsnetze und ihre Konsequenzen für die Kosten der Trinkwasserversorgung: lecture / REHATEC-WI 2007. Duisburg, 2007-10-25 [ <i>Strategies for the rehabilitation of water networks and their effects on cost trends</i> ]
	Stein, R.: Nachhaltigkeit in der Abwasserentsorgung: lecture / Infrastrukturtag 2007 & 5. Mitteldeutsche Fachtagung „Kanalbau – Kanalsanierung“. Leipzig, 2007-06-21

## Curriculum Vitae

	[Sustainable sanitation and sewage disposal concepts]
	Stein, R.: Innovative ways for condition and asset-assessment – a basic step for realistic life cycle analysis : lecture / NO DIG India 2007. New Delhi, 2006-03-29
	Stein, R.: Need of human resource development for TT industry : lecture / NO DIG India 2007. New Delhi, 2007-03-29
	Stein, R.: Why asset management after all? : lecture / NO DIG India 2007. New Delhi, 2007-03-28
	Stein, R.: Trenchless technology for the sustainable supply and disposal in infrastructure of megacities : key note address / NO DIG India 2007. New Delhi, 2007-03-28
2006	Stein, R.; Trujillo, R.; Uhlenbroch, A.; Ghaderi, S.: Condition assessment and failure analysis of sewers and mains using fuzzy-logic : lecture / NO DIG 2006. Brisbane, 2006-10-30
	Stein, R.; Trujillo, R.; Uhlenbroch, A.; Ghaderi, S.: Analysis of the long-term effects of maintenance strategies : lecture / NO DIG 2006. Brisbane, 2006-10-29
	Stein, R.: A qualification concept for civil engineers based on an innovative solution for virtual teaching, -learning and -working : lecture / 9 <sup>th</sup> German Arab Business Forum. Berlin, 2006-09-08
	Stein, R.: CargoCap – The 5 <sup>th</sup> transport alternative for pipeline-based freight transportation in congested areas : lecture / 9 <sup>th</sup> German Arab Business Forum. Berlin, 2006-09-07
	Stein, R.: Neue Wege in der Kanalreinigung durch konstruktive Präventivmaßnahmen : lecture / 3. Int. Fachforum Nassabfallexperten und Entsorgungspraktiker. Schwalenberg, 2006-09-15 [New ways of sewer cleaning by constructive preventive measures]
	Stein, R.; Uhlenbroch, A.: Erarbeitung einer optimierten Dichtheitsprüfung mit Luft : lecture / 3. Kanalbautage der DWA. Berlin, 2006-05-04 [Elaboration of an optimised leaktightness testing by air]
	Stein, R.; Uhlenbroch, A.: STATUS Sewer – a service framework for sustainable maintenance planning of sewer networks : lecture / Workshop Rehabilitation of Damaged Wastewater Pipes. Isfahan, 2006
	Stein, R.; Ghaderi, S.; Uhlenbroch, A.: Selection of rehabilitation type and technique based on section assessment and network requirements : invited lecture / Workshop Rehabilitation of Damaged Wastewater Pipes. Isfahan, 2006
2006	Stein, R.; Uhlenbroch, A.: Correct defect identification and damage assessment in general and of corrosion defects in particular as basis for efficient sewer rehabilitation planning : invited lecture / Workshop Rehabilitation of Damaged Wastewater Pipes. Isfahan, 2006
	Stein, R.; Trujillo, R.; Uhlenbroch, A.: Scenario evaluated long-term rehab strategies as appropriate tool for a failure tolerant network management of water distribution systems : invited lecture / Int. Workshop on Innov. in Water Conservation. Tehran, 2006-02-21 – 02-23
2005	Stein, R.: Bedeutung von Substanzwerten und Prognosen für die Beurteilung von Sanierungsstrategien : lecture / 11. Dortmunder Sanierungstag. Dortmund, 2005-12-08 [Importance of substance values and forecasts for the evaluation of rehabilitation]

## Curriculum Vitae

	<i>strategies]</i>
	Stein, R.: Vergleich von Sanierungsstrategien auf Basis von Investitionskosten und Substanzverzehr : lecture / 4. Sanierungstage von DWA, Güteschutz Kanalbau, RSV, GSTT. Osnabrück, 2005-11-30 – 12-01 [ <i>Comparison of rehabilitation strategies based on investment cost and depletion</i> ]
	Stein, R.: Economically motivated decisions of maintenance and their influence on the calculation of fees : invited lecture / Water Middle East 2005. Bahrain 2005-11-14 – 11-16
	Stein, R.: Master plan for a sustainable supply and disposal infrastructure of mega cities: invited lecture / Water Middle East 2005. Bahrain 2005-11-14 – 11-16
	Stein, R.: Präventive Reinigungsstrategien am Beispiel von Feststoffrückhalt aus Straßenabläufen : lecture / 33. Abwassertechn. Seminar Garching, 2005-06-30 [ <i>Preventive Cleaning Strategies exemplified by solid support by street discharge</i> ]
2005	Stein, R.: Die Optimierung von Entwässerungsnetzen unter Nutzung von Substanzwerten und Alterungsmodellen : lecture / 8. Symp. Flussgebietsmanagement des Wupperverbandes. Wuppertal, 2005-05-12 – 05-13 [ <i>Optimisation of drainage networks using substance values and ageing models</i> ]
	Stein, R.: Service Contracts in Water and Wastewater Network Management : lecture / IFAT München – PPP / PSP in the Jordan Water Sector and the Region. Munich, 2005-04-29
2004	Stein, R.: Underground transport routes for the future: lecture / 1 <sup>st</sup> Int. Conf. Innov. and Future Developm. in Cement Production and Concrete Construction. Amsterdam, 2004-12-11
	Stein, R.: CargoCap – Die 5. Alternative für den Güterverkehr : lecture / Forum Zukunft Mobilität. Hamburg, 2004-11-03 [ <i>CargoCap – The 5<sup>th</sup> alternative for freight traffic</i> ]
	Stein, R.: Netzgestützter Wissenserwerb und Multimedia im Bauingenieurwesen : lecture / GMW 04 – Jahrestagung der Ges. f. Medien i. d. Wissenschaft. Graz, 2004-09-14 – 09-17 [ <i>Network-supported knowledge acquisition and multimedia in civil engineering</i> ]
	Stein, R.: Verhalten von Abwasser-Kanalrohren bei Hochdruckspülungen : lecture / Kanalisationsforum - Werterhaltung von Kanalisationen. Bern, 2004-09-02 – 09-03 [ <i>Behaviour of sewer pipes with high pressure water jetting</i> ]
	Stein, R.: Neue Wege der Ausbildung in der Siedlungswasserwirtschaft : lecture / Kanalisationsforum - Werterhaltung von Kanalisationen. Bern, 2004-09-02 – 09-03 [ <i>New ways of education and training in the estate water management</i> ]
	Stein, R.: Renovation and maintenance of sewer systems by means of an asset management system : lecture / IFAT China 2004. Shanghai, 2004-06-27 – 06-30
	Stein, R.: Entwicklungen bei der Straßenentwässerung : lecture / 3. Regenwassertage. Trier, 2004-06-14 – 06-15 [ <i>Developments for street drainage</i> ]
2004	Stein, R.: Neue Ansätze bei der Zustandsbewertung von Kanalisationen : lecture / 17. Lindauer JT-Seminar. Lindau, 2004-03-11 – 03-12 [ <i>New approaches concerning condition evaluation of sewer systems</i> ]
2003	Stein, R.: Erfolgsfaktoren für die Einführung in Unternehmen –Organisation,

## Curriculum Vitae

	Implementierung und Didaktik des betrieblichen E – Learning : lecture / Konf. Erfolgsmodell E-Learning – Innovative Lösungen für den Mittelstand und Verwaltung. Berlin, 2003-12-10 [ <i>Factors for success in companies - organisation, implementation and didactics of operational e-learning</i> ]
	Stein, R.: Plattform für Leitungsbau und Leitungsinstandhaltung : lecture / ATV - Software-Tage, Mainz, 2003-11-19 – 11-20 [ <i>E-Learning – platform for pipeline construction and maintenance</i> ]
	Stein, R.: CargoCap: Die 5. Transportalternative zur Verlagerung von Gütertransporten von der Straße in unterirdische Rohrleitungen : lecture / URBAN 2003 – Urbane Räume von morgen. Bochum, 2003-09-24 – 09-28 [ <i>The 5<sup>th</sup> alternative for the relocation of freight traffic from the street to underground pipelines</i> ]
	Stein, R.: Urbane Projekte von morgen effizient gestalten – die Vorteile von fachlichen E-Zentren und Tools am Beispiel des Bereichs Leitungsbau und Leitungsinstandhaltung : lecture / URBAN 2003 – Urbane Räume von morgen, Bochum, 2003-09-24 – 09-28 [ <i>Efficient design of future urban projects – the advantages of technical E-centers and tools exemplified by the area sewer construction and maintenance</i> ]
	Stein, R.: E-Bau: Aktives Lernen und Arbeiten in der Baubranche : lecture / GMW 03 – Jahrestagung der Ges. f. Medien i. d. Wissenschaft. Duisburg - Essen, 2003-09-16 – 09-19 [ <i>E - Bau: Active learning and working in the construction industry</i> ]
	Stein, R.: Construction and rehabilitation of drains and sewers : invited lecture / Workshop Water & Wastewater Techn. Tehran, 2003-08-30 – 09-03
2003	Stein, R.: CargoCap: Die 5. Transportalternative zur Verlagerung von Gütertransporten von der Straße in unterirdische Rohrleitungen : lecture / 19. Verkehrswissenschaftl. Tage. Dresden, 2003-09-22 [ <i>CargoCap: The 5<sup>th</sup> alternative for the relocation of freight traffic from the street to underground pipelines</i> ]
	Stein, R.: Evolution of trenchless technologies: lecture / ASCE Int. Conf. Pipelines. Baltimore, 2003-07-13 – 07-16
	Stein, R.: CargoCap - Transportation of goods through underground pipelines research project in Germany: lecture / ASCE Int. Conf. Pipelines. Baltimore, 2003-07-13 – 07-16
	Stein, R.: UNITRACC – Web-based Training and Competence Center for Underground Infrastructure: lecture / NO DIG 2003. Las Vegas, 2003-03-31 – 04-02
	Stein, R.: Vorstellung der ersten deutschen Plattform für die Aus- und Weiterbildung für Kanal- und Rohrleitungsbauer : lecture / 16. Lindauer JT-Seminar. Lindau, 2002-03-13 – 03-14 [ <i>Introduction of the first German platform for further and advanced training and education for sewer and pipeline construction professionals</i> ]
2002	Stein, R.: CargoCap – Construction methods and pipeline routes: lecture / 3 <sup>rd</sup> Int. Symp. on Underground Freight Transportation by Capsule Pipelines and other Tube / Tunnel Systems ISUFT 2002. Bochum, 2002-09-20
	Stein, R.: Die 5. Transportalternative. Konzept und Verfahrenstechnik des unterirdischen Stückguttransportes : lecture / 5. Mainauer Mobilitätsgespräche. Mainau, 2002-07-17 [ <i>CargoCap: The 5<sup>th</sup> transportation alternative. Concept and method of underground piece good transport</i> ]



## Curriculum Vitae

	Stein, R.: Web-basierte Lehr-, Lern-, und Arbeitsplattform für den Kanal- und Rohrleitungsbauer : lecture / 15. Lindauer JT-Seminar. Lindau, 2002-03-07 – 03-08 [ <i>Web-based learning, teaching and working platform for sewer and pipeline construction professionals</i> ]
	Stein, R.: Computergestützte Entscheidungshilfesysteme zur Auswahl kostengünstiger Sanierungskonzepte – ein Fallbeispiel, Düsseldorf: lecture / 4. Dresdner Abwassertagung. Dresden, 2002-03-12 [ <i>Computer-based decision support system for the selection of cost-effective rehabilitation concepts – a case study, Düsseldorf</i> ]
2001	Stein, R.: PC-gestützte Sanierungsplanung auf Basis eines multimedialen Entscheidungshilfesystems und eines wissensbasierten Fachinformationssystems : lecture / NO DIG 2001. Prag, 2001-09-07 – 09-15 [ <i>PC-supported rehabilitation planning based on a multimedia decision support system and a knowledge-based technical information system</i> ]
	Stein, R.: Computergestützte Entscheidungshilfesysteme zur Auswahl kostengünstiger Sanierungskonzepte – ein Fallbeispiel, Düsseldorf: lecture / Fachkonf. Kostenoptimierte Kanalsanierungsplanung. Düsseldorf, 2001-08-22 [ <i>Computer-based decision support-system for the selection of cost-effective rehabilitation concepts – a case study, Düsseldorf</i> ]
	Stein, R.: Einsatzfelder von Berstverfahren – Darstellung der unterschiedlichen Verfahrensspezifikationen : lecture / Erfahrungen mit Kanalsanierungsverfahren. Kassel, 2001-05-29 [ <i>Application of pipe bursting – presentation of the different method specifications</i> ]
2000	Stein, R.: Darstellung eines digitalisierten Kanalsanierungsverfahrens : lecture / 8. Symp. Grabenlos. Spittal, 2000-11-15 – 11-16 [ <i>Presentation of a digitised sewer rehabilitation method</i> ]
	Stein, R.: Ausbildungskonzept zur Kanaldichtheitsprüfung : lecture / 13. Lindauer JT-Seminar. Lindau, 2000-03-16 – 03-17 [ <i>Training and further education concept for sewer tightness testing</i> ]
1999	Stein, R.: Neue Wege der Wissensvermittlung für die "Instandhaltung von Kanalisationen" anhand des gleichnamigen multimedialen Informationssystems : lecture / Int. Symp. f. Leitungsnetze. Lindau, 1999-06-10 – 06-12 [ <i>New ways of knowledge transfer for the "Rehabilitation and Maintenance of Drains and Sewers" based on the homonymous multimedia information system</i> ]
	Stein, R.: Sachgerechte Wahl von Kanalsanierungsverfahren : lecture / 32. Essener Tagung f. Wasser- und Abfallwirtschaft. Essen, 1999-03-17 – 03-19 [ <i>Appropriate selection of sewer rehabilitation methods</i> ]
	Stein, R.: Neue Wege zur Verbesserung der Aus- und Weiterbildung : lecture / 12. Lindauer JT-Seminar. Lindau, 1999-03-04 – 03-05 [ <i>New ways of improving further education and training</i> ]
1998	Stein, R.: Municipal insights into trenchless technology: lecture / 1 <sup>st</sup> Int. Videoconf. Trenchless Techn. Hamburg, 1998-01-21
1997	Stein, R.: Multimedia decision support system for the selection of techniques for construction and rehabilitation of buried pipes: lecture / NO DIG 1997. Taipei, 1997-11-26

## Curriculum Vitae

– 11-28

Stein, R.: Development of technologies to support worker training and construction planning education: lecture / Purdue University. Indianapolis, 1995

### Awards

2007 Deutschland Land der Ideen (Germany Land of Ideas) 2007 under the patronage of the President of the Federal Republic Germany Dr. Horst Köhler, UNITRACC

2005 NO DIG-Award by the International Society for Trenchless Technology (ISTT) for outstanding projects in the area sewer- and pipeline construction, category: "Scientific Research and further Training" for the information-, learning- and working-platform UNITRACC

2004 eureleA 2004; European e-Learning Award for best practice – examples of innovative further education and training, category "small enterprises" for the e-learning - project "Go2Learning / UNITRACC"

2000 NO DIG-Award by the International Society for Trenchless Technology (ISTT) for the "Technical Information System Rehabilitation and Maintenance of Drains and Sewers"

Federal Laureate at the LERNET – competition of the German Federal Ministry of Economy and Technology (BMWi) with the project "Go2Learning"