CURRICULUM VITAE

PERSONAL DATA

Name:	LEBENSOHN, Ricardo Anibal
Citizenship:	Argentina (US Permanent Resident)
Year of birth:	1963
Address:	MST8 - MS 755 - LANL Los Alamos, NM, 87545, USA
Phone #:	+1-505-665-3035
Fax #:	+1-505-667-8021
e-mail:	lebenso@lanl.gov

LANGUAGES

1. Mother Tongue: SPANISH.
2. Fluent in ENGLISH and FRENCH.

EDUCATION

1989 - 1993:	Graduate studies: PhD in Physics, Facultad de Ciencias Exactas e Ingeniería (FCEIA, School of Science and Engineering), Universidad Nacional de Rosario (UNR), Argentina.
1982 - 1988:	Undergraduate studies: *Licenciado en Física* (high-school degree + 5 years, equivalent to Master in Physics), FCEIA, UNR, Argentina.
1976 - 1980:	High School studies: *Bachiller Técnico Químico* (Chemistry Technician), Instituto Politécnico, UNR, Argentina.

PRESENT EMPLOYMENT

2003 - present:	Researcher. Materials Science and Technology Division, Los Alamos National Laboratory (LANL), Los Alamos, NM, USA.

PREVIOUS EMPLOYMENT

1997 - 2003:	Researcher of CONICET (National Research Council of Argentina), Instituto de Física Rosario (IFIR).
2001:	Long-term Visiting Staff Member, LANL, Los Alamos, USA.
1995 - 2003:	Associate Professor, Physics Department, UNR.
1995 - 2003:	Researcher of UNR's Research Council at IFIR.
1994:	Postdoc, Laboratoire Génie Physique et Mécanique de Matériaux (GPM2), Grenoble, France.
1989 - 1993:	Doctoral Fellowship of CONICET, IFIR, Rosario, Argentina.
1988 - 1993:	Teaching Assistant at UNR, Rosario, Argentina

VISITING POSITIONS

Visiting positions held, for periods between 1 and 3 months:

2006, 2002:	Professeur Invité, Université Paris-Nord, Villetaneuse, France.
2005:	Chercheur Invité, Ecole Polytechnique, Palaiseau, France.
2000, 1998, 1997:	Visiting Scientist. LANL, Los Alamos, USA.
2000, 1999:	Visiting Scientist, Centre de Mise en Forme (CEMEF), Sophia-Antipolis, France
1999:	Visiting Scientist. Dpt of Mech. & Aerospace Eng., Cornell University, Ithaca, USA.
1998, 1996, 1995:	Visiting Scientist. Technische Universitat Hamburg-Harburg, Hamburg, Germany.
1997:	Fulbright Scholar. Department of Geology and Geophysics, University of California, Berkeley, USA.
1995, 1994:	Visiting Scientist. RISØ National Laboratory, Roskilde, Denmark.

RESEARCH INTERESTS

Mechanics of materials. Micromechanical and multiscale modelling of the mechanical behavior of solids with experimental integration. Prediction of mechanical properties of heterogeneous media using homogenization and full-field approaches. Coupling between Finite Element analysis and homogenization techniques. Constitutive laws. Plastic deformation, texture development and microstructure evolution of polycrystalline metals and minerals and nanostructured materials.

SUMMARY OF SCIENTIFIC PRODUCTION AND ACTIVITIES

- 1 doctoral thesis.
- 42 articles in peer-reviewed international journals.
- > 850 cites in ISI Citation Index.
- 1 book chapter.
- 34 articles in proceedings of international conferences.
- 10 articles in national publications.
- 4 industrial technical reports.
- 21 invited lectures in international conferences and research institutions.
- 81 contributed presentations in international conferences.
- 29 presentations in national conferences.
- Supervisor of 2 master thesis and co-supervisor of 1 PhD thesis.
- Principal Investigator of 7 research projects.
- Reviewer for 12 international journals.

ARTICLES IN PEER-REVIEWED INTERNATIONAL JOURNALS

2007

43. C. Deo, C.N. Tomé, R.A. Lebensohn and S. Maloy: "Modeling and simulation of irradiation hardening in structural ferritic steels for advanced nuclear reactors". Journal of Nuclear Materials, submitted.
42. R.A. Lebensohn, C.N. Tomé and P. Ponte Castañeda: "Self-consistent modeling of the mechanical behavior of viscoplastic polycrystals incorporating intragranular field fluctuations". Philosophical Magazine, accepted.
41. B. Plunkett, O. Cazacu, R.A. Lebensohn and F. Barlat: "Elastic-viscoplastic anisotropic modelling of textured metals and validation using the Taylor cylinder impact test". International Journal of Plasticity 23, pp.1001-1021 (2007).
40. R.A. Lebensohn, E.M. Bringa and A. Caro: "A viscoplastic micromechanical model for the yield strength of nanocrystalline materials". Acta Materialia 55, pp. 261-271 (2007).

2006

39. B. Plunkett, R. A. Lebensohn, O. Cazacu and F. Barlat: "Evolving yield function of hexagonal materials taking into account texture development and anisotropic hardening". Acta Materialia 54, pp. 4159-4169 (2006).
38. O. Castelnau, R. Brenner and R.A. Lebensohn: "The effect of strain heterogeneity on the work-hardening of polycrystals predicted by mean-field approaches". Acta Materialia 54, pp. 2745-2756 (2006).
37. S. Nikolov, R.A. Lebensohn and D. Raabe: "Self consistent modeling of large plastic deformation, texture and morphology evolution in semi-crystalline polymers". Journal of the Mechanics and Physics of Solids 54, pp. 1350-1375 (2006). *1 citation.*

2005

36. R.A. Lebensohn, O. Castelnau, R. Brenner and P. Gilormini: "Study of the antiplane deformation of linear 2-D polycrystals with different microstructures". International Journal of Solids and Structures 42, pp. 5441-5459 (2005). *2 citations.*

2004

35. R.A. Lebensohn, Y. Liu and P. Ponte Castañeda: "On the accuracy of the self-consistent approximation for polycrystals: comparison with full-field numerical simulations". Acta Materialia 52, pp. 5347-5361 (2004). *10 citations.*
34. R. A. Lebensohn, Y. Liu and P. Ponte Castañeda: "Macroscopic properties and field fluctuations in model power-law polycrystals: full-field solutions versus self-consistent estimates". Proceedings of the Royal Society of London A 460, pp. 1381-1405 (2004). *9 citations.*

33. R.A. Lebensohn, C.N Tomé and P.J. Maudlin: "A selfconsistent formulation for the prediction of the anisotropic behavior of viscoplastic polycrystals with voids". Journal of the Mechanics and Physics of Solids 52, pp.249-278 (2004). *3 citations.*

2003

32. H. Francillette, A. Gavrus, R. A. Lebensohn: "A constitutive law for the mechanical behavior or Zr702a". Journal of Material Processing Technology 142, pp 43-51 (2003). *3 citations.*
31. R.A. Lebensohn, P.R. Dawson, H.M. Kern and H.-R. Wenk: "Heterogeneous deformation and texture development in halite polycrystals: comparison of different modeling approaches and experimental data". Tectonophysics 370, pp. 287-311 (2003). *7 citations.*
30. I.J. Beyerlein, R.A. Lebensohn and C.N. Tomé: "Modeling of texture and microstructural evolution in the equal channel angular process". Materials Science and Engineering A345, pp.122-138 (2003). *50 citations.*

2002

29. C.N. Tomé. R.A. Lebensohn and C.T Necker: "Orientation correlations and anisotropy of recrystallized aluminium". Metallurgical and Materials Transactions 33A, pp 2635,2648 (2002). *15 citations.*

2001

28. C.N. Tomé, P.J. Maudlin, R.A. Lebensohn and G.C. Kaschner: "Mechanical response of zirconium. Part I: Derivation of a polycrystal constitutive law and finite element analysis". Acta Materialia 49, pp 3085-3096 (2001). *40 citations.*
27. O. Castelnau, H. Francillette, B. Bacroix and R.A. Lebensohn: "Texture dependent plastic behavior of Zr-702 at large strain". Journal of Nuclear Materials 297, pp 14-26 (2001). *7 citations.*
26. R.A. Lebensohn**:** "N-site modelling of a 3D viscoplastic polycrystal using Fast Fourier Transform". Acta Materialia 49, pp 2723-2737 (2001). *20 citations.*

2000

25. R.E. Logé, J.W. Signorelli, Y.B. Chastel, M.Y. Perrin and R.A. Lebensohn: "Sensitivity of alpha-Zircaloy-4 high temperature deformation textures to the beta-quenched precipitates structure and to recrystallization. Application to hot extrusion". Acta Materialia 48, pp 3917-3930 (2000). *6 citations.*
24. D.A. Hughes, R.A. Lebensohn, H.-R. Wenk and A. Kumar: "Stacking fault energy and microstructure effect on torsion texture evolution". Proceedings of the Royal Society of London A 456, pp 921-954 (2000). *16 citations.*
23. H.-R. Wenk, J.R. Baumgardner, R.A. Lebensohn and C.N. Tomé: "A convection model to explain anisotropy of the inner core". Journal of Geophysical Research B 105, pp 5663-5673 (2000). *14 citations.*

22. J. W. Signorelli, R.E. Logé, Y.B. Chastel and R.A. Lebensohn: "Parameter identification method for a polycrystalline viscoplastic selfconsistent model based on analytical derivatives of the direct model equations". Modelling and Simulation in Materials Science and Engineering 8, pp 193-209 (2000). *5 citations.*

1999

21. T. Takeshita, H.-R. Wenk and R. Lebensohn: "Development of preferred orientation and microstructure in sheared quartzite: comparison of natural data and simulated results". Tectonophysics 312, pp. 133-155 (1999). *15 citations.*
20. R. Lebensohn: "Modelling the role of local correlations in polycrystal plasticity using viscoplastic selfconsistent schemes". Modelling and Simulation in Materials Science and Engineering 7, pp 739-746 (1999). *5 citations.*
19. R.A. Lebensohn and T. Leffers: "The rules for the lattice rotation accompanying slip as derived from a selfconsistent model". Textures and Microstructures 31, pp 217-230 (1999). *3 citations.*

1998

18. R.A. Lebensohn, P.A. Turner, J.W. Signorelli, G.R. Canova and C.N. Tomé: "Calculation of intergranular stresses based on a large strain viscoplastic selfconsistent polycyrstal model". Modelling and Simulation in Materials Science and Engineering 6, pp 447-465 (1998). *11 citations.*
17. R. Lebensohn, H. Uhlenhut, C. Hartig and H. Mecking: Mechanical behavior γ-TiAl-based polysinthetically twinned crystals: micromechanical modelling and experimental validation". Acta Materialia 46, pp. 4701-4709 (1998). *19 citations.*
16. R.A. Lebensohn, H.-R. Wenk and C.N. Tomé: "Modelling deformation and recrystallization textures in calcite". Acta Materialia 46, pp 2683-2693 (1998). *22 citations.*

1997

15. R.E. Bolmaro, R.A. Lebensohn and H.-G. Brokmeier: "Crystal spin in 2-site selfconsistent models: from kinematics to kinetics". Computational Materials Science 9, pp. 237-250 (1997). *6 citations.*
14. R.A. Lebensohn, P.A. Turner and G.R. Canova: "Recent advances in modelling polycrystals with complex microstructures". Computational Materials Science 9, pp 229-236 (1997). *4 citations.*
13. H. Francillette, B. Bacroix, M. Gasperini, O. Castelnau et R.A. Lebensohn: "Etude des mécanismes de déformation et des evolutions de textures du Zirconium 702-alpha déformé en compression plane à la température ambiante". La Revue de Métallurgie, Septembre, pp 1071-1079 (1997). *1 citation.*
12. O. Castelnau, G.R. Canova, R.A. Lebensohn and P. Duval: "Modelling viscoplastic behavior of anisotropic polycrystalline ice with a selfconsistent approach". Acta Materialia 45, pp 4828-4834 (1997). *19 citations.*

11. R.A. Lebensohn and G.R. Canova: "A selfconsistent approach for modelling texture development of two-phase polycrystals: application to Titanium alloys". Acta Materialia 45, pp 3687-3694 (1997). *33 citations.*

1996

10. R.A. Lebensohn and C.N. Tomé: "Yield loci calculation of hcp materials using a self-consistent polycrystalline model". Textures and Microstructures 26-27, pp 513-529 (1996). *5 citations.*
9. O. Castelnau, P. Duval, R.A. Lebensohn and G.R. Canova: "Viscoplastic modelling of texture development in polycrystalline ice with a self-consistent approach: comparison with bound estimates". Journal of Geophysical Research B 101, pp 13851-13868 (1996). *53 citations.*
8. R.A. Lebensohn, M.I. González, C. Tomé and A.A. Pochettino: "Measurement and prediction of texture development during a rolling sequence of Zircaloy-4 tubes". Journal of Nuclear Materials 229, pp 57-64, (1996). *10 citations.*
7. R. Lebensohn, D. Solas, G. Canova and Y. Brechet: "Modelling damage of Al-Zn-Mg alloys". Acta Materialia 44, pp 315-325, (1996). *14 citations.*

1994

6. R.A. Lebensohn and C.N. Tomé: "A self-consistent visco-plastic model: calculation of rolling textures of anisotropic materials". Material Science and Engineering A 175, pp 71-82 (1994). *46 citations*
5. R.A. Lebensohn, P.V. Sanchez and A.A. Pochettino: "Modelling texture development of zirconium alloys at high temperature". Scripta Metallurgica et Materialia 30, pp 481-486 (1994). *16 citations*

1993

4. R.A. Lebensohn and C.N. Tomé: "A selfconsistent approach for the simulation of plastic deformation and texture development of polycrystals: application to Zirconium alloys". Acta Metallurgica et Materialia 41, pp 2611-2624, (1993). *277 citations*
3. R.A. Lebensohn and C.N. Tomé: "A study of stress state associated with twinning nucleation and propagation in anisotropic materials". Philosophical Magazine A 67, pp 187-206 (1993). *16 citations.*.

1991

2. C.N. Tomé, R.A. Lebensohn and U.F. Kocks: "A model for texture development dominated by deformation twinning: application to Zirconium alloys". Acta Metallurgica et Materialia 39, pp 2667-2680, (1991). *67 citations.*
1. R.A. Lebensohn and C.N. Tomé: "Modelling twinning in texture development codes". Textures and Microstructures 14-18, pp 959-964, (1991). *5 citations.*

ARTICLES IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

34. R. A. Lebensohn R. Brenner and O. Castelnau: "Full-field model and experimental validation of subgrain texture and microstructure evolution of polycrystalline copper". In: *Proceedings of the 7th. International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM 2007),* American Institute of Physics, in press.

33. B. Plunkett, O. Cazacu, R.A. Lebensohn and F. Barlat: "Anisotropic viscoplastic constitutive modeling for metals and application to the Taylor impact test". In: *Proc. of Symposium on Plasticity and Impact Mechanics (IMPLAST 2007),* Bochumer Universitätsverlag, in press.

32. R.A. Lebensohn, E.M. Bringa and A. Caro: "A micromechanical study of the effect of grain size and strain rate on the yield strength of nanostructured materials". In*: Proceedings of the 3rd International Conference on Multiscale Materials Modeling*, P. Gumbsch ed., Fraunhofer IRB Verlag, pp. 204-207 (2006).

32. B. Plunkett, O. Cazacu and R.A. Lebensohn: "Strain-rate effects on the texture evolution of low-symmetry metals: modeling and validation using the Taylor cylinder impact test". Journal de Physique IV 134, pp. 81-86 (2006).

31. R.A. Lebensohn, E.M. Bringa and A. Caro: "Continuum mesoscale modeling of nanocrystalline fcc metals under shock loading using a spectral formulation fed by Molecular Dynamics results". Journal de Physique IV 134, pp. 17-22 (2006).

30. R.A. Lebensohn, C.N. Tomé and P. Ponte Castañeda: "Improving the self-consistent predictions of texture development of polycyrystals incorporating intragranular field fluctuations". Materials Science Forum 495-497, pp. 955-964 (2005).

29. R.A. Lebensohn, P.J. Maudlin and C.N. Tomé: "Viscoplastic selfconsistent modelling of the anisotropic behavior of voided polycrystals". In: *Proceedings of the 6th. International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM 2004),* S. Ghosh, J.M. Castro and J.K. Lee eds. American Institute of Physics, pp. 1771-1776 (2004).

28. R.A. Lebensohn, C.N. Tomé and P.J. Maudlin: "Modeling texture and void evolution in polycrystals". Materials Science Forum Vol. 408-412, pp. 323-328 (2002).

27. I.J. Beyerlein, R.A. Lebensohn and C.N. Tomé: "Polycrystal constitutive modeling of ECAP: Texture and microstructural evolution". In: *Ultrafine Grained Material II*, Y.T. Zhu, T.G. Langdon, R.S. Mishra, S.L. Semiatin, M.J. Saran, and T.C. Lowe eds., The Minerals, Metals & Materials Society, pp. 585-593 (2002).

26. H. Francillette, B. Bacroix, R.A. Lebensohn and J.L. Béchade: "Final textures in cold rolled Zr702a polycrystalline samples". Journal de Physique IV 11, Pr.4, pp. 83-90 (2001).

25. R.E. Logé, Y.B. Chastel, M.Y. Perrin, J.W. Signorelli and R.A. Lebensohn: "Hot extrusion of Zircaloy-4 tubes: induced crystallographic textures and influence of the initial microstructure". In: *Mathematical Modeling in Metal Processing and Manufacturing*, P. Martin and W.J. Liu, S. MacEwen, Y. Verreman and J. Goldak eds., The Metallurgical Society of CIM, Canada, CD-ROM (2000).

24. T. Takeshita, H.-R. Wenk and R. Lebensohn: "Comparison of natural and simulated quartz shear texture". In: *Proceedings of 12th Int. Conf. on Textures of Materials (ICOTOM 12*), J.A. Szpunar ed., NRC Research Press, Ottawa, Canada, pp. 1534-1539 (1999).

23. P. Sanchez, A. Pochettino and R. Lebensohn: "Texture effects on the evolution of high temperature mechanical properties in Zirconium alloys". In: *Proceedings of 12th Int. Conf. on Textures of Materials (ICOTOM 12)*, J.A. Szpunar ed., NRC Research Press, Ottawa, Canada, pp. 451-456 (1999).

22. J. W. Signorelli, A. Fourty, R. Lebensohn and R.E. Bolmaro: "Critical stress identification in textured materials using selfconsistent polycrystalline inverse model". In: *Proceedings of 12th Int. Conf. on Textures of Materials (ICOTOM 12)*, J.A. Szpunar ed., NRC Research Press, Ottawa, Canada, pp. 316-321 (1999).

21. P.Sanchez, R. Lebensohn and A.A. Pochettino: "Influence of microstructural evolution on the macroscopic behavior of Zr alloys predeformed at high temperature". In: *Modelling of Structure and Mechanics of Materials from Microscale to Product*, J.V.Carstensen, T. Leffers, T. Lorentzen, O.B. Pedersen, B.F. Sorensen and G. Winther eds., RISØ National Laboratory, Roskilde, Denmark, pp. 455-460 (1998).

20. R. Lebensohn, J. Signorelli and H. Uhlenhut: "Multiscale modelling of lamellar structures: application to γ-TiAl-based alloys". In: *Modelling of Structure and Mechanics of Materials from Microscale to Product*, J.V.Carstensen, T. Leffers, T. Lorentzen, O.B. Pedersen, B.F. Sorensen and G. Winther eds., RISØ National Laboratory, Roskilde, Denmark, pp. 331-337 (1998).

19. R.A. Lebensohn, D.A. González and J.W. Signorelli: "Microstructures, anisotropy and mechanical properties of polycrystals: modelling strategies at different scales". In: *Computational Mechanics - New Trends and Applications*, S.R. Idelsohn, E. Oñate and E.N. Dvorkin eds., CIMNE, Barcelona, Spain, CD-ROM : Part III, Section 1, paper 7 (1998).

18. R. Logé, Y. Chastel, J. Signorelli, R. Lebensohn, and P. Barberis: "Modeling anisotropic evolution in sheet metal forming using a viscoplastic polycrystalline self-consistent model coupled with a 3D finite element code". In: *Proceedings of the 6$^{th.}$ International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM'98)*, J. Huétink and F.P.T. Baaijens eds., Balkema, Rotterdam, pp. 309-313 (1998).

17. M. Ortiz, R. Lebensohn, P. Turner and A. Pochettino: "Development of intergranular residual stresses in Zirconium alloys". In: *Proceedings of the 5th. Int. Conf. on Residual Stresses (ICRS-5*), T. Ericsson, M. Odén and A. Anderson eds., Linköping University, Sweden, pp. 781-786 (1997).

16. C.N. Tomé, T.M. Holden, P.A. Turner and R.A. Lebensohn: "Interpretation of intergranular stress measurements in Monel-400 using polycrystal models". In: *Proceedings of the 5th. Int. Conf. on Residual Stresses (ICRS-5)*, T. Ericsson, M. Odén and A. Anderson eds., Linköping University, Sweden, pp.40-45 (1997).

15. R.A. Lebensohn, P.A. Turner, J.W. Signorelli and C.N. Tomé: "Selfconsistent calculation of intergranular stresses based on a large strain viscoplastic model". In: *Proceedings of the 5th. Int. Conf. on Residual Stresses (ICRS-5)*, T. Ericsson, M. Odén and A. Anderson eds., Linköping University, Sweden, pp. 460-465 (1997).

14. H. Francillette, B. Bacroix, M. Gasperini et R.A. Lebensohn: "Caractérisation des mécanismes de déformation actifs dans les alliages de Zr-alpha et utilization de modèles de passage micro-macro". In: *Le Zirconium - Journeés d'Etudes - Propriétés-Microstructures*, G. Cailletaud et P. Lemoine eds., Les Editions de Physique, pp. 57-66 (1996).

13. R.E. Bolmaro and R.A. Lebensohn: "Modelling texture development of 2-phase materials by selfconsistent approaches". In: *Proceedings of the 11th. Int. Conf. on Textures of Materials (ICOTOM-11),* Z. Liang et al. eds., International Academic Publ., pp. 1209-1214 (1996).

12. R. Logé, Y. Chastel, G. Dumas, V. Lamy, D. Gex and R. Lebensohn: "Texture induced anisotropy of Zrly-4 during compression: modelling and experimental validation". In: *Proceedings of the 11th. Int. Conf. on Textures of Materials (ICOTOM-11),* Z. Liang et al. eds., International Academic Publ., pp. 818-823 (1996).

11. P. Sanchez, R. Lebensohn and A. Pochettino: "Predictions of torsion textures development of Zr-alloys". In: *Proceedings of the 11th. Int. Conf. on Textures of Materials (ICOTOM-11),* Z. Liang et al. eds., International Academic Publ., pp. 342-346 (1996).

10. T. Leffers and R.A. Lebensohn: "Ambiguities in the calculation of lattice rotations for plane-strain deformation". In: *Proceedings of the 11th. Int. Conf. on Textures of Materials (ICOTOM-11),* Z. Liang et al. eds., International Academic Publ., pp. 307-314 (1996).

9. G.R Canova, S. Favier, R. Lebensohn and B. Baudelet: "Modelling of damage due to particles and grain boundaries". Materials Science Forum, Vol. 217-222, pp. 1441-1448 (1996).

8. G.R. Canova and R. Lebensohn: "Micro-macro modelling". In: *Computer Simulation in Materials Science*, H.O. Kirchner et al. eds., Kluwer Academic Publ., pp. 449-481 (1996).

7. J.W. Signorelli, P.A. Turner, R.A. Lebensohn and A.A. Pochettino:" Polycrystalline models for the calculation of residual stresses in Zirconium alloys tubes". In: Transactions of the 13th. International Conference on Structural Mechanics in Reactor Technology, M.M. Rocha and J. de Riera eds., pp.705-711, (1995).

6. T. Leffers, N.J. Sorensen and R.A. Lebensohn: "The uncertainty in the calculation of the changes in crystallographic orientation which lead to deformation texture". In: *Dynamic Plasticity and Structural Behaviors*, S. Tanimura and A.S. Khan eds., Gordon & Breach Publ., pp. 273-276, (1995).

5. R.A. Lebensohn and R.E. Bolmaro: "Comparison of a self-consistent approach and a pure kinematical model for plastic deformation and texture development". Materials Science Forum Vol. 157-162, pp. 1809-1814, (1994).

4. A.A. Pochettino, P. Sanchez, R. Lebensohn and C.N. Tomé: "Temperature effects on rolling texture formation in Zirconium alloys". Materials Science Forum Vol. 157-162, pp. 835-840, (1994).

3. R.A. Lebensohn, C. Vial Edwards, A.A. Pochettino and C.N. Tomé: "Texture and yield locus evolution in 70/30 Brass under different deformation paths". Materials Science Forum Vol. 157-162, pp. 783-788, (1994).

2. C.N. Tomé, N. Christodoulou, R. Holt, C.H. Woo, R.A. Lebensohn and P.A. Turner: "Deconvolution of experimental data of aggregates using selfconsistent polycrystal models". In: *Numerical Predictions of Deformation Processes and Behavior of Real Materials*, S.I. Andersen, J.B. Bilde-Sorensen, T. Lorentzen, O.B. Pedersen, N.J. Sorensen eds., RISØ National Laboratory, Roskilde, Denmark, pp. 169-204, (1994).

1. P.V. Sanchez, R.A. Lebensohn, M.I. Gonzalez and A.A. Pochettino: "Modelling of rolling texture development in zirconium alloys tubes". In: *Numerical Predictions of Deformation Processes and Behavior of Real Materials*, S.I. Andersen, J.B. Bilde-Sorensen, T.

Lorentzen, O.B. Pedersen, N.J. Sorensen eds. RISØ National Laboratory, Roskilde, Denmark, pp. 531-536, (1994).

BOOK CHAPTER

1. C.N. Tomé and R.A. Lebensohn: “Self-consistent homogeneization methods for texture and anisotropy”. Chapter 18 of *Continuum Scale Simulation of Engineering Materials: Fundamentals, Microstructures, Process Applications.* D. Raabe, F. Roters, F. Barlat and L.-Q. Chen (Eds.), Willey, pp. 352-378 (2004).

TECHNICAL REPORTS

4. R.A. Lebensohn, C.N Tomé and P.J. Maudlin: ”An extended self-consistent visco-plastic polycrystal formulation: application to polycrystals with voids”. Los Alamos National Laboratory Internal Report LA-UR-03-1193 (2003). URL: http://www.lanl.gov/mst/docs/VoidReport.pdf
3. J. Signorelli, R. Lebensohn et Y. Chastel: "Optimisation de textures de laminage du Zircaloy-4 vis à vis de l'emboutissage: validation du modéle autocohérente et couplage à un code éléments finis". CEZUS, Rapport Technique, France (1997).
2. R.A. Lebensohn and P.A. Turner: "The Viscoplastic Inclusion: Extended Formulation". Nota Técnica NT130601 - Comisión Nacional de Energía Atómica, Argentina (1996).
1. C. Tomé, N. Christodoulou, R. Holt, C.H. Woo, R. Lebensohn and P. Turner: "Deconvolution of Experimental Data of Aggregates using Selfconsistent Polycrystal Models". Internal Report AECL RC-1472, COG-I-95-431 - Atomic Energy Canada Ltd., Canada (1995).

INVITED LECTURES

21. R.A. Lebensohn, C.N. Tomé and P. Ponte Castañeda: “Multiscale modelling of viscoplastic polycrystals using statistical approaches at the mesoscale”. Invited Lecture, IUTAM Symposium on Multiscale Plasticity of Crystalline Materials, Einhoven, The Netherlands, November 2007.
20. R.A. Lebensohn: "Modelling subgrain texture evolution in polycrystalline copper with direct input from microstructure images and assessment of nonlinear homogenization approaches using a full-field formulation based on Fast Fourier Transforms". Laboratory Seminar, Laboratoire de Méchanique et d'Acoustique, Marseille, France, June 2007.
19. R.A. Lebensohn, R. Brenner and O. Castelnau: "Modelling subgrain texture evolution with experimental validation using direct input from microstructure images". Keynote Lecture. First US-France Symposium on Advances in Bridging Scales in Computation. From Microstructure to Macroscale Properties of Heterogeneous Materials. Shalimar, FL, USA, March 2007.
18. R.A. Lebensohn and C.N. Tomé: "Self-consistent predictions of the mechanical behavior of viscoplastic polycrystals accounting for intragranular field fluctuations". Invited talk.

2007 TMS Annual Meeting & Exhibition, Orlando, FL, USA, February 2007.

17. R.A. Lebensohn: "Towards improved multiscale modelling of viscoplastic geomaterials: full-field and statistical approaches at the mesoscale". Invited Seminar. University of California San Diego, Scripps Institution of Oceanography, La Jolla, CA, USA, December 2006.

16. R.A. Lebensohn: "Full-field and statistical approaches for the prediction of mechanical behavior and microstructure evolution of viscoplastic polycrystals". Department Seminar. University of California San Diego, Department of Mechanical and Aerospace Engineering, La Jolla, CA, USA, December 2006.

15. R.A. Lebensohn: "A formulation based on Fast Fourier Transforms for the calculation of the micromechanical behavior of plastically deformed 3-D polycrystals". Department Seminar. Carnegie-Mellon University, Department of Materials Science and Engineering, Pittsburgh, PA, USA, October 2006.

14. R.A. Lebensohn: "Modelling the local and effective behavior of viscoplastic polycrystals". Invited Lecture. 2nd Marie Curie Summer School on Knowledge-based Materials, Alvdalen, Sweden, August 2006.

13. R.A. Lebensohn: "A formulation based on Fast Fourier Transforms for the calculation of the micromechanical behavior of plastically deformed 3-D polycrystals". Invited Seminar. Centre des Matériaux, Ecole de Mines de Paris, Evry, France, April 2006.

12. R.A. Lebensohn, C.N. Tomé and P. Ponte Castañeda: "Improving the self-consistent predictions of texture development of polycyrystals incorporating intragranular field fluctuations". Invited Lecture, 14th International Conference on Textures of Materials (ICOTOM 14), Leuven, Belgium, July 2005.

11. R.A. Lebensohn: "Homogenization of the dilatational viscoplastic behavior of anisotropic porous polycrystal". Laboratory Seminar. Ecole Polytechnique, Laboratoire de Mécanique des Solides, Palaiseau, France, June 2005.

10. R.A. Lebensohn: "Micromechanical modeling of polycrystals at different scales". Department Seminar. Rutgers University, Department of Mechanical and Aerospace Engineering, Piscataway, NJ, USA, November 2001.

9. R.A. Lebensohn: "Micromechanical modeling of polycrystals at different scales". Department Seminar, University of Pennsylvania, Department of Mechanical Engineering and Applied Mechanics, Philadelphia, PA, USA, November 2001.

8. R.A. Lebensohn: "Micromechanical modeling of polycrystals at different scales". Invited Seminar. California Institute of Technology, Division of Engineering and Applied Science, Pasadena, CA, USA, May 2001.

7. R.A. Lebensohn: "N-site modelling of a viscoplastic polycrystal using Fast Fourier Transform". Invited Seminar. Laboratoire de Génie Physique et Mécanique de Matériaux, Grenoble, France, July 2000.

6. R.A. Lebensohn: "Modelling the Mechanical Behavior of γ-TiAl-Based Polysinthetically Twinned Crystals and Polycrystals". Invited Lecture. International Workshop on Micromechanics of Multiphase Materials, Hamburg, Germany, September 1998.

5. R.A. Lebensohn: "Multiscale modelling of polycrystal plasticity". Invited Seminar. Université Paris-Nord, Laboratoire des Propriétés Mécaniques et Thermodynamiques des Matériaux, Villetaneuse, France, June 1998.

4. R.A. Lebensohn: “Recent improvements and applications of selfconsistent models in polycrystal plasticity”. Invited Lecture. Gilles Canova Memorial Meeting, Autrans, France, June 1998.
3. R.A. Lebensohn: "Selfconsistent methods for the calculation on mechnical properties of polycrystals: fundaments and applications" Invited Seminar. Techint, Centro de Investigación Industrial (CINI), Campana, Argentina, August 1997.
2. R.A. Lebensohn: "Selfconsistent methods for the calculation on mechnical properties of polycrystals: fundaments and applications". Invited Seminar. Balseiro Institute, Computational Mechanics Division. Bariloche, Argentina, May 1997.
1. R.A. Lebensohn: "Crystal plasticity of two-phase materials". Invited Lecture. 6th International Workshop on Computational Mechanics of Materials, Hamburg, Germany, October 1996.

REVIEWER OF ARTICLES OF INTERNATIONAL JOURNALS

Reviewer for the following journals:

Acta Materialia, Scripta Materialia, Philosophical Magazine A, Modelling and Simulation in Material Science and Engineering, Nature, Journal of Applied Crystallography, Journal of the Mechanics and Physics of Solids, Proceedings of the Royal Society of London A, Material Science and Engineering, International Journal of Solids and Structures, Journal of Materials Science, Journal of Nuclear Materials

MEMBER OF EDITORIAL BOARDS OF INTERNATIONAL JOURNALS

Member of the Editorial Board of the journal Texture, Stress, and Microstructure.

TEACHING EXPERIENCE

From 1988 to 2003, I have taught the following courses at the Science and Engineering School of the National University of Rosario, Argentina:

Undergraduate Courses: Numerical Analysis and Computational Methods**,** Mathematical Analysis**,** General Physics**,** Thermodynamics and Physicochemestry**,** Continuum Mechanics.

Graduate Courses: Textures of Materials**,** Modeling Mechanical Properties of Materials.

PRINCIPAL INVESTIGATOR OF RESEACH PROJECTS

1- Prediction of texture development, yield surface and earing profile of Al sheets. Contract between IFIR (Argentina), CEMEF (France) and Pechiney (Voreppe Research Center, France), 1996.

2- VPSC-FEM coupling for the prediction of metal forming of Zr-alloys. Contract between IFIR (Argentina), CEMEF (France) and Cezus (Ugine Research Center, France), 1996-1997.

3- Study of polycrystal deformation by Finite Element and homogeneization methods: 3D models and experimental validation ECOS Program of scientific cooperation between Argentina and France, 1998-2001.

4- Microstructure, anisotropy and mechanical properties of polycrystals: modeling strategies at different scales. CONICET, Argentina, 1998.

5- Microstructure, anisotropy and mechanical properties of polycrystals: modeling strategies at different scales. UNR, Argentina, 1999-2000.

6- Microstructure, anisotropy and mechanical properties of polycrystals. ANPCyT (National Agency of Promotion of Science and Technology), Argentina, 1998-1999.

7- Modelling the mechanical response of heterogeneous materials: n-site formulation based on the Fast Fourier Transform. Antorchas Foundation, Argentina, 2000.

8- Characterization of hcp Materials. LANL's WFO Program, sponsored by Eglin Air Force Research Laboratory, 2005-2007.

COLLABORATIONS

Carlos Tomé, Paul Maudlin (LANL, USA), Pedro Ponte Castañeda (UPenn, USA), Oana Cazacu (Univ. of Florida, USA), Brian Plunkett, Mike Nixon (Eglin AFRL, USA), Olivier Castelnau, Renald Brenner (Paris-Nord, France), Eduardo Bringa, Alfredo Caro (Livermore, USA), Paul Duval, Maurine Montagnat (LGGE, France), Raúl Bolmaro, Javier Signorelli, Pablo Turner (IFIR, Argentina), Pierre Gilormini (ENSAM, France), Heinz Mecking (TUHH, Germany), Rudy Wenk (UC Berkeley, USA), Torben Leffers, Grethe Winther (RISØ, Denmark), Svetoslav Nikolov, Dierk Raabe (Max Planck Institute, Germany), Pierre Suquet (CNRS Marseille, France), Mark Jessell (Toulouse, France), Tony Rollett (Carnegie-Mellon, USA), Yvan Chastel, Roland Logé (CEMEF, France), Said Ahzi (Strasbourg, France), Esteban Busso (EMP, France).