

## *Publications of Walter Noll*

The numbers prefixed to the papers reprinted in this volume are set in **bold type** in the list below. The pages on which they appear here are indicated at the right.

In the texts reprinted, both such errata as have been published before and also some further ones are included. Whenever it was feasible to do so, the text itself has been corrected, but in some few cases errata are listed at the ends of the works to which they pertain.

### BOOKS

- I. *The Non-Linear Field Theories of Mechanics, Encyclopedia of Physics*, Volume III/3, 602 pages, Berlin-Heidelberg-New York, Springer-Verlag, 1965 (with C. TRUESDELL)
- II. *Viscometric Flows of Non-Newtonian Fluids, Theory and Experiment*, Springer Tracts in Natural Philosophy, Volume 5, 130 pages, Berlin-Heidelberg-New York, Springer-Verlag, 1966 (with B. D. COLEMAN and H. MARKOVITZ)

### PAPERS AND NOTES

1. Eine Bemerkung zur Schwarzschen Ungleichheit, *Mathematische Nachrichten*, Volume 7, pp. 55–59 (1952) (with E. MOHR)
2. On the Continuity of the Solid and Fluid States, *Journal of Rational Mechanics and Analysis*, Volume 4, pp. 3–81 (1955)
3. Die Herleitung der Grundgleichungen der Thermomechanik der Kontinua aus der statistischen Mechanik, *Journal of Rational Mechanics and Analysis*, Volume 4, pp. 627–646 (1955)
4. Verschiebungsfunktionen für elastische Schwingungsprobleme, *Zeitschrift für angewandte Mathematik und Mechanik*, Volume 37, pp. 81–87 (1957)
5. On the Uniqueness and Non-existence of Stokes Flow, *Archive for Rational Mechanics and Analysis*, Volume 1, pp. 97–106 (1957) (with R. FINN)
6. On the Rotation of an Incompressible Continuous Medium in Plane Motion, *Quarterly of Applied Mathematics*, Volume 15, pp. 317–319 (1957)
7. On Exterior Boundary Value Problems in Linear Elasticity, *Archive for Rational Mechanics and Analysis*, Volume 2, pp. 191–196 (1958) (with R. J. DUFFIN)
8. A Mathematical Theory of the Mechanical Behavior of Continuous Media, *Archive for Rational Mechanics and Analysis*, Volume 2, pp. 197–226 (1958)

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9. The Foundations of Classical Mechanics in the Light of Recent Advances in Continuum Mechanics, pp. 266–281 of *The Axiomatic Method, with Special Reference to Geometry and Physics* (Symposium at Berkeley, 1957), Amsterdam, North-Holland Publishing Co., 1959 32–47
10. On Certain Steady Flows of General Fluids, *Archive for Rational Mechanics and Analysis*, Volume 3, pp. 289–303 (1959) (with B. D. COLEMAN) 49–63
11. Helical Flow of General Fluids, *Journal of Applied Physics*, Volume 30, pp. 1508–1512 (1959) (with B. D. COLEMAN)
12. Conditions for Equilibrium at Negative Absolute Temperatures, *The Physical Review*, Volume 115, pp. 262–265 (1959) (with B. D. COLEMAN)
13. On the Thermostatistics of Continuous Media, *Archive for Rational Mechanics and Analysis*, Volume 4, pp. 97–128 (1959) (with B. D. COLEMAN) 65–96
14. An Approximation Theorem for Functionals with Applications in Continuum Mechanics, *Archive for Rational Mechanics and Analysis*, Volume 6, pp. 355–370 (1960) (with B. D. COLEMAN) 97–112
15. Recent Results in the Continuum Theory of Viscoelastic Fluids, *Annals of the New York Academy of Science*, Volume 89, pp. 672–714 (1961) (with B. D. COLEMAN)
16. Foundations of Linear Viscoelasticity, *Reviews of Modern Physics*, Volume 33, pp. 239–249 (1961) (with B. D. COLEMAN) 113–123
17. Normal Stresses in Second-order Viscoelasticity, *Transactions of the Society of Rheology*, Volume 5, pp. 41–46 (1961) (with B. D. COLEMAN)
18. Steady Extension of Incompressible Simple Fluids, *The Physics of Fluids*, Volume 5, pp. 840–843 (1962) (with B. D. COLEMAN)
19. Simple Fluids with Fading Memory, pp. 530–552 of *Second-Order Effects in Elasticity, Plasticity, and Fluid Dynamics* (Symposium at Haifa, 1962), Oxford etc., Pergamon Press, 1964 (with B. D. COLEMAN)
20. Motions with Constant Stretch History, *Archive for Rational Mechanics and Analysis*, Volume 11, pp. 97–105 (1962) 125–133
21. La Mécanique Classique, Basée sur un Axiome d'Objectivité, pp. 47–56 of *La Méthode Axiomatique dans les Mécaniques Classiques et Nouvelles* (Colloque International, Paris, 1959), Paris, Gauthier-Villars, 1963 135–144
22. The Thermodynamics of Elastic Materials with Heat Conduction and Viscosity, *Archive for Rational Mechanics and Analysis*, Volume 13, pp. 167–178 (1963) (with B. D. COLEMAN) 145–156

23. Material Symmetry and Thermoelastic Inequalities in Finite Elastic Deformations, *Archive for Rational Mechanics and Analysis*, Volume 15, pp. 87–111 (1964) (with B. D. COLEMAN) 157–181
24. Euclidean Geometry and Minkowskian Chronometry, *American Mathematical Monthly*, Volume 71, pp. 129–144 (1964) 183–198
25. Proof of the Maximality of the Orthogonal Group in the Unimodular Group, *Archive for Rational Mechanics and Analysis*, Volume 18, pp. 100–102 (1965) 200–202
26. The Equations of Finite Elasticity, pp. 93–101 of *Symposium on Applications of Nonlinear Partial Differential Equations in Mathematical Physics* (1964), Providence, American Mathematical Society, 1965
27. The Foundations of Mechanics, pp. 159–200 of *Non-Linear Continuum Theories* (C. I. M. E. Lectures, 1965), Rome, Cremonesi, 1966
28. Space-Time Structures in Classical Mechanics, pp. 28–34 of *Delaware Seminar in the Foundations of Physics*, Berlin-Heidelberg-New York, Springer-Verlag, 1967 204–210
29. Materially Uniform Simple Bodies with Inhomogeneities, *Archive for Rational Mechanics and Analysis*, Volume 27, pp. 1–32 (1967) 211–242
30. Inhomogeneities in Materially Uniform Simple Bodies, pp. 239–246 of *IUTAM Symposium on Mechanics of Generalized Continua* (1967), Berlin-Heidelberg-New York, Springer-Verlag, 1968
31. Quasi-invertibility in a Staircase Diagram, *Proceedings of the American Mathematical Society*, Volume 23, pp. 1–4 (1969)
32. Representations of Certain Isotropic Tensor Functions, *Archiv der Mathematik*, Volume 21, pp. 87–90 (1970)
33. On certain Convex Sets of Measures and on Phases of Reacting Mixtures, *Archive for Rational Mechanics and Analysis*, Volume 38, pp. 1–12 (1970)
34. Annihilators of Linear Differential Operators, *Journal d'Analyse*, Volume 24, pp. 205–284 (1971) (with H. D. DOMBROWSKI)
35. A New Mathematical Theory of Simple Materials, *Archive for Rational Mechanics and Analysis*, Volume 48, pp. 1–50 (1972) 243–292
36. Lectures on the Foundations of Continuum Mechanics and Thermodynamics, *Archive for Rational Mechanics and Analysis*, Volume 52, pp. 62–92 (1973) 294–324

Several of the above-listed papers have been reprinted already in collective volumes, as follows:

Nos. 2, 8, 10, 11, and 14 in

*Continuum Mechanics II, The Rational Mechanics of Materials*, International Science Review Series, Volume VIII, Part 2, New York etc., Gordon & Breach, 1965.

Nos. 13 and 16 in

*Continuum Mechanics III, Foundations of Elasticity Theory*, International Science Review Series, Volume VIII, Part 3, New York etc., Gordon & Breach, 1965.

Nos. 8, 29, and 30 in

*Continuum Theory of Inhomogeneities in Simple Bodies*, New York, Springer-Verlag, 1968.