11. The molecular motor of claim 1, wherein the first array is coated on a first curved surface, and the second array is coated on a second curved surface.

12. The molecular motor of claim 10, wherein one of the arrays is coated on an outer surface of a cylinder, shaft or cone, and another of the arrays is coated on an inner surface of a surrounding structure having a complementary shape that substantially conforms to a shape of the outer surface of the cylinder, shaft or cone.

13. The molecular motor of claim 1, wherein directional movement of the second array moves a driver.

14. The molecular motor of claim 13, wherein the driver is an internal shaft or cylinder in the motor.

15. The molecular motor of claim 13, wherein the driver is an outer curved surface of the motor.

16. The molecular motor of claim 2, wherein the driven member is a rotating shaft, a propeller, a wheel, a lever-arm, a gear system, or a pulley system.

17. The molecular motor of claim 1, wherein the arrays are of a preselected dimension that provides a preselected power output of the motor.

18. The molecular motor of claim 17, wherein the preselected dimension is a length of the array.

19. The molecular motor of claim 3, wherein a preselected number of multiple nested arrays are provided to select a speed of rotation of the motor.

20. A molecular rotary motor, comprising:

a curved continuous first surface to which is attached a circumferential coating of a first motor protein;

a complementary continuous curved second surface to which is attached a circumferential coating of a second motor protein that interacts with the first motor protein to move the second surface relative to the first surface.

21. The molecular motor of claim 20, wherein the continuous curved surface is a closed surface of rotation having an internal radius.

22. The molecular motor of claim 21, wherein the closed surface of rotation is a cylindrical or conical surface.

23. The molecular motor of claim 20, wherein the first motor protein is actin and the second motor protein is myosin.

24. A molecular motor comprising:

a series of concentric tubes or hollow cones, wherein each of the tubes or hollow cones has an outer surface and an inner surface;

a first motor protein attached in a continuous ring around the outer surface of each of the tubes or cones;

a second motor protein attached in a continuous complementary ring around the inner, surface of each of the tubes or cones;

wherein one of the motor proteins is applied directionally to the surfaces, and the inner and outer surfaces are in sufficiently close contact that the first and second motor proteins interact to move the first and second motor proteins, and the outer and inner surface, relative to one another.

25. The molecular motor of claim 24, wherein the first motor protein is actin, which is applied directionally around the outer surface of each of the tubes or cones, and the second motor protein is myosin, which interacts with the actin to move the inner surfaces relative to the outer surfaces.

26. The molecular motor of claim 25, wherein the outer surface includes nickel, and the actin is anchored to the outer surface by a histidine tag which binds to the nickel in the outer surface.

27. The molecular motor of claim 24, wherein the first motor protein is present on the outer surface in an array that extends both longitudinally along and circumferentially around the tube or cone.

28. The molecular motor of claim 24, further comprising a driver rotated by movement of the first and second motor proteins relative to one another.

29. The molecular motor of claim 28, wherein the driver is driven by a rotating inner tube or cone of the motor.

30. The molecular motor of claim 28, wherein the driver is driven by a rotating outermost tube or cone.

31. A molecular motor comprising:

an inner cylinder or tube, having a coating of actin directionally adhered to an outer surface of the cylinder;

a tubular member around the inner cylinder, the tubular member having a coating of myosin adhered to an inner surface of the tubular member, with the actin and myosin interacting to move the outer surface relative to the inner surface.

32. A method of making a molecular motor, comprising:

providing a first continuous curved surface which rotates around a longitudinal axis;

providing a second curved surface which rotates around the longitudinal axis, and is complementary in shape to the first surface;

adhering a first motor protein to the first surface, and adhering a second motor protein to the second surface, wherein the first and second motor proteins interact to move the first and second surfaces relative to one another.

33. The method of claim 32, wherein one of the motor proteins is actin and another of the motor proteins is myosin.

34. The method of claim 33, wherein the actin is adhered to the surface with a tag that interacts with a component of the surface.

35. The method of claim 34, wherein the actin is recombinant actin expressed with the tag.

36. The method of claim 34, wherein the tag comprises histidine, an Stag, or streptavidin.

37. The method of claim 33, wherein the actin is directionally applied to one of the curved surfaces by rotating the curved surface in an actin containing solution.

38. The method of claim 32, further comprising:

supplying a fuel source to the first and second motor proteins to activate movement of the first and second surfaces relative to one another.

39. The method of claim 38, wherein the fuel source is ATP.

40. The molecular motor of claim 1, further comprising:

a supply of a fuel source, wherein the supply of the fuel source is used to activate movement of the second array relative to the first array.